

Produced By:

**Commodore International Spare Parts GmbH
Braunschweig, West Germany**

SERVICE MANUAL

**1084S-P1
PAL VERSION**

SEPTEMBER, 1990

PN-314688-01

1059

INTERNATIONAL EDITION

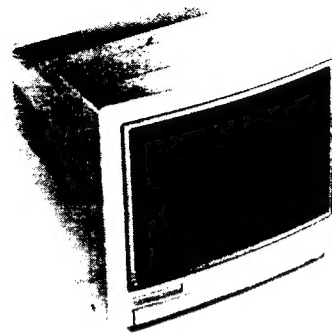
COMMODORE "INTERNATIONAL EDITION" SERVICE MANUALS CONTAIN PART NUMBER INFORMATION WHICH MAY VARY ACCORDING TO COUNTRY. SOME PARTS MAY NOT BE AVAILABLE IN ALL COUNTRIES.

TECHNICAL DATA**General**

- mains voltage 220-240 V (10%)
- mains frequency 50 Hz
- power consumption 75 W

Picturetube

- size 14"
- deflection angle 90°
- EHT 25KV
- slot triplet pitch 0.42 mm
- type M34EAQ10X

**Video**

- vertical frequency 50 Hz (47-62,5 Hz)
- horizontal frequency 15625 Hz (± 60 Hz)
- bandwidth 8 Mz
- characters 2000

Audio

- loudspeaker 16 Ω /1 W/3"
- output power 1 W

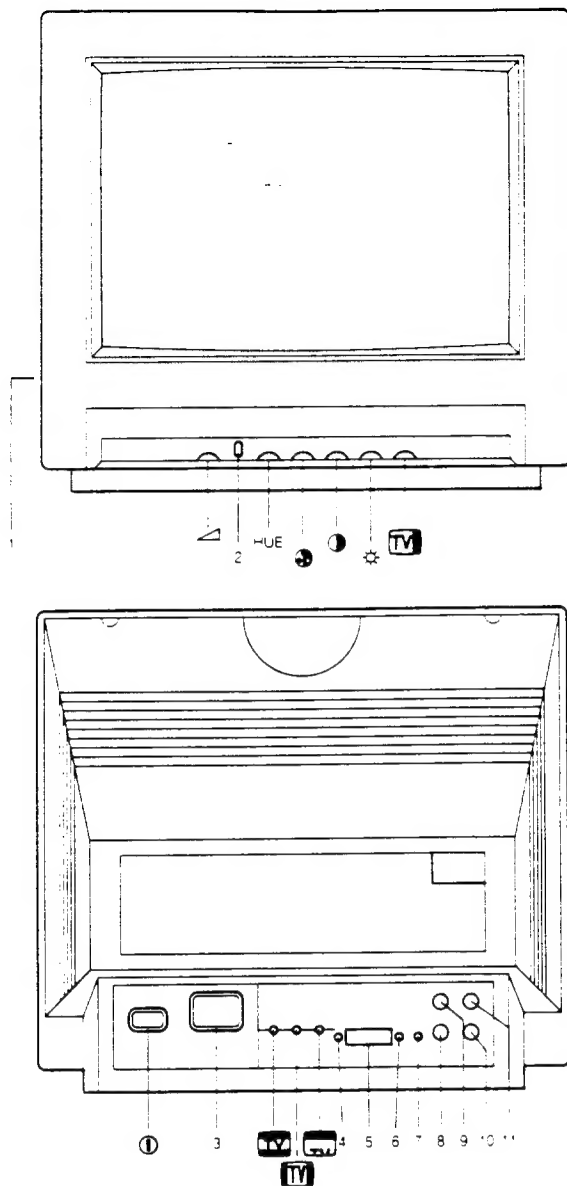
REMARKS

- 1) The direct voltages indicated in the circuit diagram are average voltages. They have been measured under the following conditions:
Contrast and brightness to minimum.
- 2) The oscillograms have been measured under the following conditions:
Signal from a RGB pattern generator (SBC 522) on colour bar pattern.
Adjust brightness and contrast for mechanical mid-position (click position).

WARNING

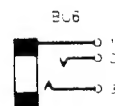
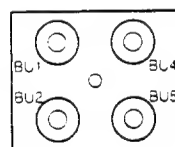
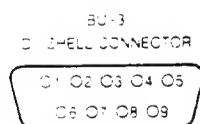
All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce life drastically.
When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance. Keep components and tools also at this potential.





1. Headphones connection
2. "GREEN" switch
3. Mains voltage connector
4. RGB ANALOG/TTL switch
5. "D" SHELL connector
6. RGB/CVBS, LCA switch
7. LCA/CVBS switch
8. Luminance/CVBS input
9. Chrominance input
10. AUDIO-L input
11. AUDIO-R input

INPUT AND OUTPUT SOCKETS

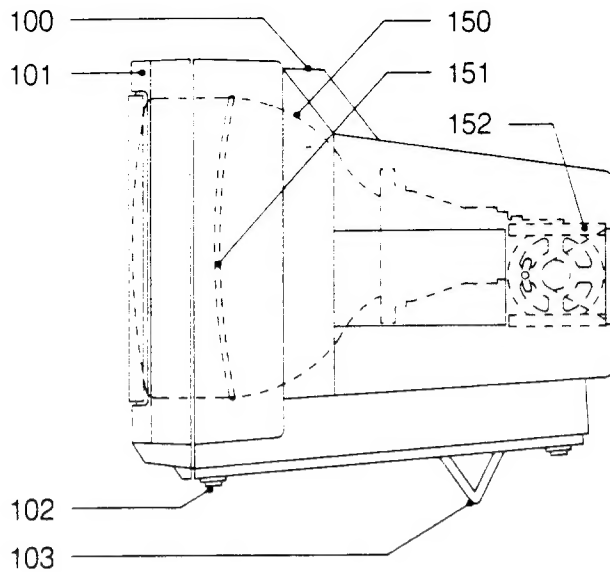


PIN	SIGNAL LOGIC	SENSITIVITY	IMPEDANCE
1	NC		
2	RED	Linear 0.7V	75 Ω
3	GREEN		75 Ω
4	BLUE		75 Ω
5	INTENSITY	TTL LEVEL	75 Ω
6	LINE SYNC	LINEV	75 Ω
7	HOR SYNC	TTL LEVEL	75 Ω
8	VER SYNC	LINEV	75 Ω

BU	SIGNAL	SENSITIVITY	IMPEDANCE
BU1	CHROMINANCE	0.35V rms	75 Ω
BU2	LUMINANCE CVBS	0.35V rms	75 Ω
BU4	AUDIO-R	117mV rms	10k Ω
BU5	AUDIO-L	117mV rms	10k Ω

PIN	SIGNAL	SENSITIVITY	IMPEDANCE
1	NC		
2	LEFT CHANNEL	21V rms	32 Ω
3	RIGHT CHANNEL	21V rms	32 Ω

CABINET



Cabinet parts

100	3138 107 70460	Back cover
101	3138 107 70440	Front
102	3138 104 12540	Foot
103	3138 104 12500	Stand
104	4822 417 50231	Lock
105	3138 107 70450	Lid
106	3138 104 12520	Knob (5x)
107	3138 104 12620	Push button
108	4822 535 91695	Adjust rod (3x)
105	4822 410 60444	Push button (3x)

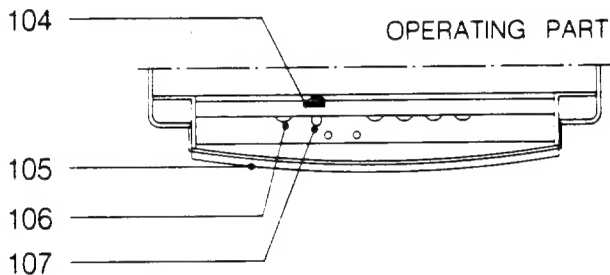
General electrical parts

150	4822 131 20279	Picture tube (type M34EAQ01X+AT1460)
151	4822 157 60478	Degaussing coil
152	4822 240 30296	Loudspeaker

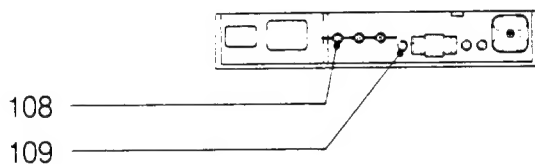
Accessories

4822 321 10657	mains cable
4822 154 50148	Interface cable (9 pole "D" SHELL - 9 pole "D" SHELL)
4822 154 50149	Interface cable (8 DIN-3RCA)
4822 321 60297	Interface cable (1 RCA-2RCA)
4822 154 50147	Interface cable (9 pole "D" SHELL-23 pole "D" SHELL)

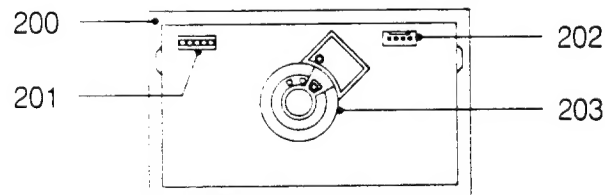
OPERATING PART



CONNECTION PART




CRT PANEL



Mechanical parts

200	4822 212 23316	CRT panel complete
201	4822 265 30784	Socket (5 pins)
202	4822 265 30783	Socket (4 pins)
203	4822 255 70216	Socket for CRT

CAUTION

- 1) Safety requirements stipulate that, during repair, the set should be restored in its original state and that parts, identical to the specified ones, should be applied.
- 2) For safety reasons, the parts provided with the sign  should be replaced by identical parts (for code numbers see electrical parts lists).
- 3) To avoid damages to ICs and transistors, flash-over of the high-tension should be avoided.
- 4) Be careful when performing measurements in the high-tension section and on the picture tube.
- 5) Never change parts when the set is still switched on.
- 6) Safety goggles must be worn during replacement of the picture tube.

ELECTRICAL SETTINGS**1. SETTINGS ON THE CHASSIS****1.1 +128V supply voltage(3414)**

- Apply video signal to the monitor.
- Set volume control 3295, brightness control 3662 and contrast control 3658 to minimum.
- Set trimming potentiometer 3414 in mid-position. (This is a presetting).
- Connect DC voltmeter to junction of resistor 3520 and diode 6453.
- Switch on monitor.
- With trimming potentiometer 3414 set the DC voltage at junction 3524/6453 to 128V.

1.2 Horizontalsynchronisation (3257)

- Apply video signal (cross-hatch pattern) to the monitor.
- Short capacitor 2270. (This capacitor is connected to pin 5 of IC 7270.)
- With trimming potentiometer 3257 adjust the picture so that it is straight.
- Remove the short-circuit on 2270.

1.3 Picture positionsettings

General: For the following settings apply a video signal (cross-hatch pattern) to the monitor.

1.3.1 East-west correction (3537)

- With potentiometer 3537 make the vertical lines on the left and right-hand side of the screen as straight as possible.

1.3.2 Picture width (3534)

- With potentiometer 3534 set the picture width for 14 blocks to 260 mm.

1.3.3 Horizontal picture centering (3264)

- With potentiometer 3264 set the correct horizontal centering.

1.3.4 Vertical picture centering (3583)

- With potentiometer 3583 set the correct vertical picture centering.

1.3.5 Picture height (3550)

- With potentiometer 3550 set the picture height for 10 blocks to 186 mm.

1.3.6. Vertical linearity (3573)

- Adjust the correct vertical linearity with Pre-set potentiometer 3573 IF necessary repeat 1.3.5 and 1.3.6.

1.4 Setting of:

- VG2 (bottom knob on the line output transformer)
- cut-off points of the picture tube (3107, 3117 and 3127)
- white "D" (3671, 3680)
- Set the brightness to 1/4 of its range and set the contrast to minimum.
- Set the potentiometers 3107, 3117, 3127, 3671 and 3680 in mechanical mid-position.
- Set VG2 potentiometer to minimum.
- Set the signal generator in "pur" position and introduce the respective colours red, green and blue.
- Using potentiometers 3107, 3117 and 3127 with the corresponding colour pattern, set the voltage on the picture tube pins 8, 6 and 11 to 100V.
- Apply a white frame and adjust the VG2 potentiometer so that any colour among red, green or blue becomes visible.
- Set the pattern generator to purity with the colour that was first visible.
- Reset VG2 potentiometer to just visible light.
- Adjust the two remaining colours with their corresponding purity colour to the same light output using potentiometers 3107, 3117 or 3127.
- Return the signal generator to white frame and adjust the potentiometers 3107, 3117 and 3127 so that an optimum background colour is obtained.
- Using potentiometers 3671 and 3680 (with white frame) adjust the background colour so that at minimum brightness and maximum brightness the background colour is the same.

1.5 Focusing (top knob on line outputtransformer)

- Apply white pattern to monitor.
- Adjust focusing so that the picture at 2/3 of the diagonal lines (counting from center to four corners) of the displayed screen is as sharp as possible.

1.6 Subcarrier oscillator(2613)

- Apply colour bar pattern to monitor.
- Connect 470Ω resistor between point 11 of IC 7610 and earth.
- Adjust 2613 so that the colour picture on the screen is stationary.
- Remove the 470Ω resistor.

1.7 PAL delay line (3619, 5632)

- Apply DEM pattern from a pattern generator to the monitor.
- Set brightness control 3662, contrast control 3658 and colour saturation control 3654 to 3/4 of the range.
- Adjust 3619 so that the "venetian blinds" in the third bar disappear.
- Then adjust 5632 until the "venetian blinds" in the first and fourth bar disappear.
- Readjust 3619 as described above.

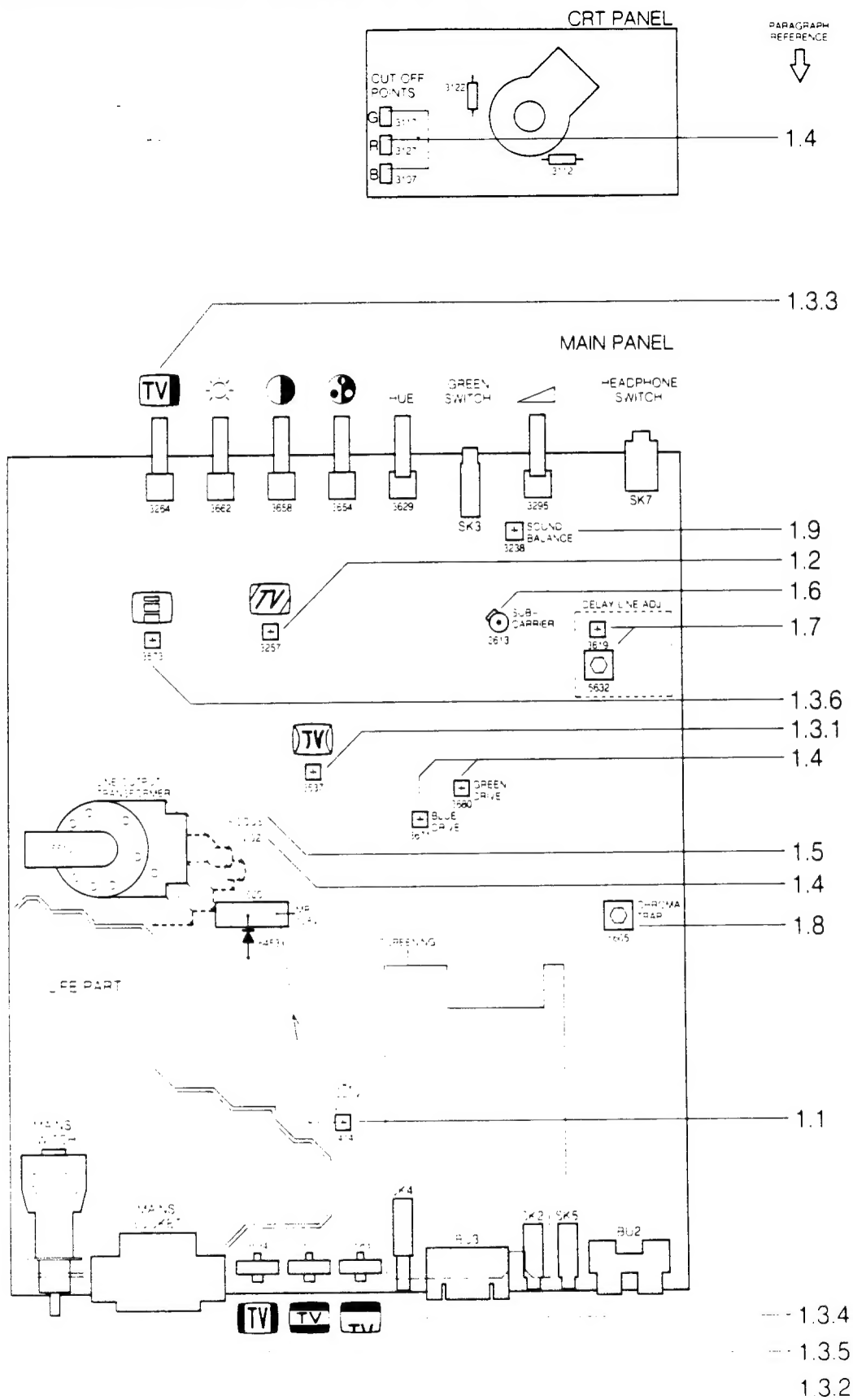
1.8 Chrominance suppression(5605)

- Apply colour bar pattern to the monitor.
- Connect oscilloscope to pin 15 of IC 7640.
- Set 5605 so that the chrominance signal is minimum. (The chrominance signal is superimposed on the grey steps of the luminance signal).

1.9 Audio balance (3298)

- Apply sinusoidal signal of 177mVrms (1KHz) to both audio inputs L/R.
- Set volume control in mid-position.
- Replace the two loudspeakers with a 16Ω resistor.
- Set 3298 so that the output level on both 16Ω resistors is the same.

LOCATION OF ADJUSTING COMPONENTS



2. PICTURE SETTINGS

Remarks:

- The following adjustments only apply to monitors which are fitted with a replaceable deflection unit.
- In case of combi tube replacement, no picture settings is required because it has been done by factory already
- The colour purity and convergence adjustments described hereafter need only to be carried out if a completely new setting is required or if a new picture tube has been fitted. In other cases, for example after replacing the deflection unit, it will not usually be necessary to remove the rubber wedges (G in figure 3). Corrections by means of the multi-pole unit will then suffice.
- Focusing adjustment described in item 1.5 must be done prior to picture settings.

2.1 Colourpurity, see figure 3

- Unscrew the fixing screw "F" on the deflection unit.
- Move the deflection unit and remove the three rubber wedges "G".
- Move the deflection unit forward as far as possible against the glass of the picture tube cone and tighten fixing screw "F" so that the deflection unit can only be shifted slightly.
- Place the multi-pole unit in the position drawn: tighten screw "A" and turn locking ring "B" anticlockwise.
- Position the monitor to face east or west and switch it on. Apply a cross-hatch pattern and set the brightness control to maximum. Allow the monitor to warm up for ten minutes.
- Adjust the static convergence using tags "C" and "D" (if necessary, refer to point 2.2.).
- Turn 3583 for the vertical centering to its mid-position. Switch off the green and blue gun by disconnecting resistors 3122 and 3112.

- By turning the colour purity rings with the "E" tags, the vertical red bar is brought as close as possible to the centre of the screen, whilst the central horizontal line should be as straight as possible.
- Apply a white pattern signal and check that the red bar is in fact in the centre of the screen. If not, switch on the cross-hatch pattern again and move the red bar in the right direction, ensuring that the picture does not move too much in the vertical direction.
- Apply the white pattern signal and move the deflection unit until the whole picture surface is uniformly red.
- Switch on the green and the blue gun. There may be no colour patches in the white picture now obtained. If there are, a minor correction can be made by turning the colour purity rings "E" slightly and/or moving the deflection unit slightly.
- Tighten screw "F" securely.
- Adjust the vertical centering with 3583.
- Proceed to the static and then the dynamic convergence setting.

2.2 Staticconvergence, see figure 3

- Apply a cross-hatch pattern and allow the monitor to warm up for ten minutes.
- Switch off the green gun by disconnecting resistor 3122 and turn locking ring "B" anticlockwise.
- By turning the four-pole rings with the "C" tags the red and blue cross-hatch patterns are placed on top of each other in the centre of the screen.
- Switch on the green gun by connecting resistor 3122 back to its original position and switch off the blue gun by disconnecting 3112.
- By turning the six-pole rings with the "D" tags the red and green patterns are placed on top of each other in the centre of the screen.
- Switch on the blue gun by connecting resistor 3112 back to its original position and tighten ring "B".

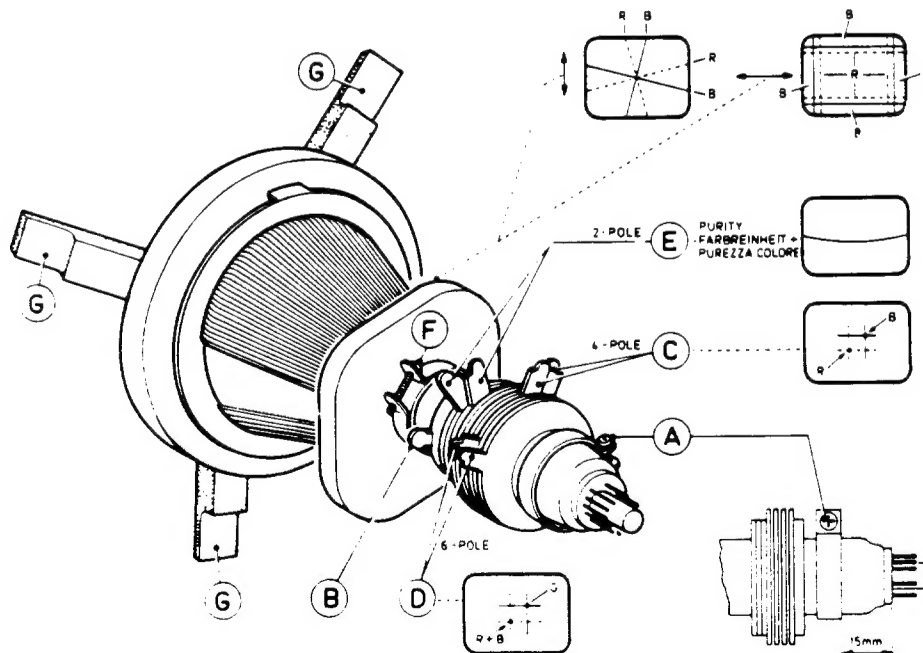


Fig. 3

2.3 Dynamicconvergence

Remark:

The dynamic convergence is achieved by tilting the deflection unit vertically and horizontally. In order to fix the deflection unit in the right position, three rubber wedges are fitted between the glass of the picture tube cone and the deflection unit, as shown in fig. 4d or 5d. Two wedge thicknesses are available, one 7 mm thick, code number 4822 462 40356 and the other 11 mm thick, code number 4822 462 40357.

- First check the colour purity and the static convergence.
- Apply a cross-hatch pattern and switch off the green gun by disconnecting resistor 3122.
- Eliminate the crossing of the central horizontal blue and red line and the crossing of the central vertical blue and red line by vertically tilting the deflection unit. If the deflection unit is in the correct position, then place rubber wedge ①, without removing the paper strip, at the top (figure 4a) or at the bottom (figure 5a).

Figure 4a applies when the unit is tilted upwards and figure 5a applies when the unit is tilted downwards.

- Through the horizontal tilting of the deflection unit, both the horizontal blue and red lines in the upper and lower halves of the picture and the vertical blue and red lines on the left and right-hand side of the picture are placed on top of each other.

If the deflection unit is in the correct position, then place the wedges ② and ③, remove the paper strips and firmly press the adhesive side of these wedges against the glass of the picture tubes as shown in figure 4b or 5b.

- Now place wedge ④ as shown in figure 4c or 5c, remove the paper strip and firmly press the adhesive side of this wedge against the glass of the picture tube cone.
- Remove wedge ① so that the situation according to figure 4d or 5d arises.
- Switch on the green gun by connecting resistor 3122 back to its original position.

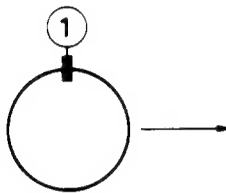


Fig. 4a

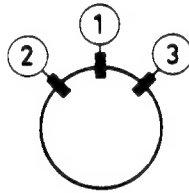


Fig. 4b

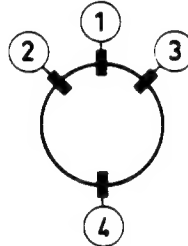


Fig. 4c

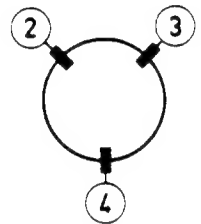


Fig. 4d

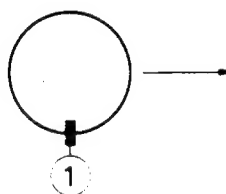


Fig. 5a

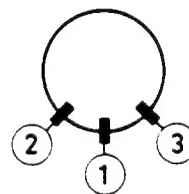


Fig. 5b

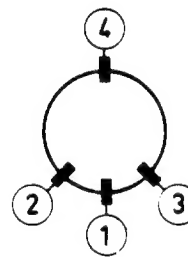


Fig. 5c

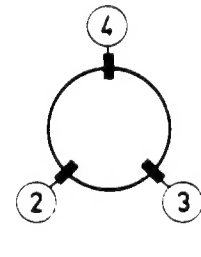
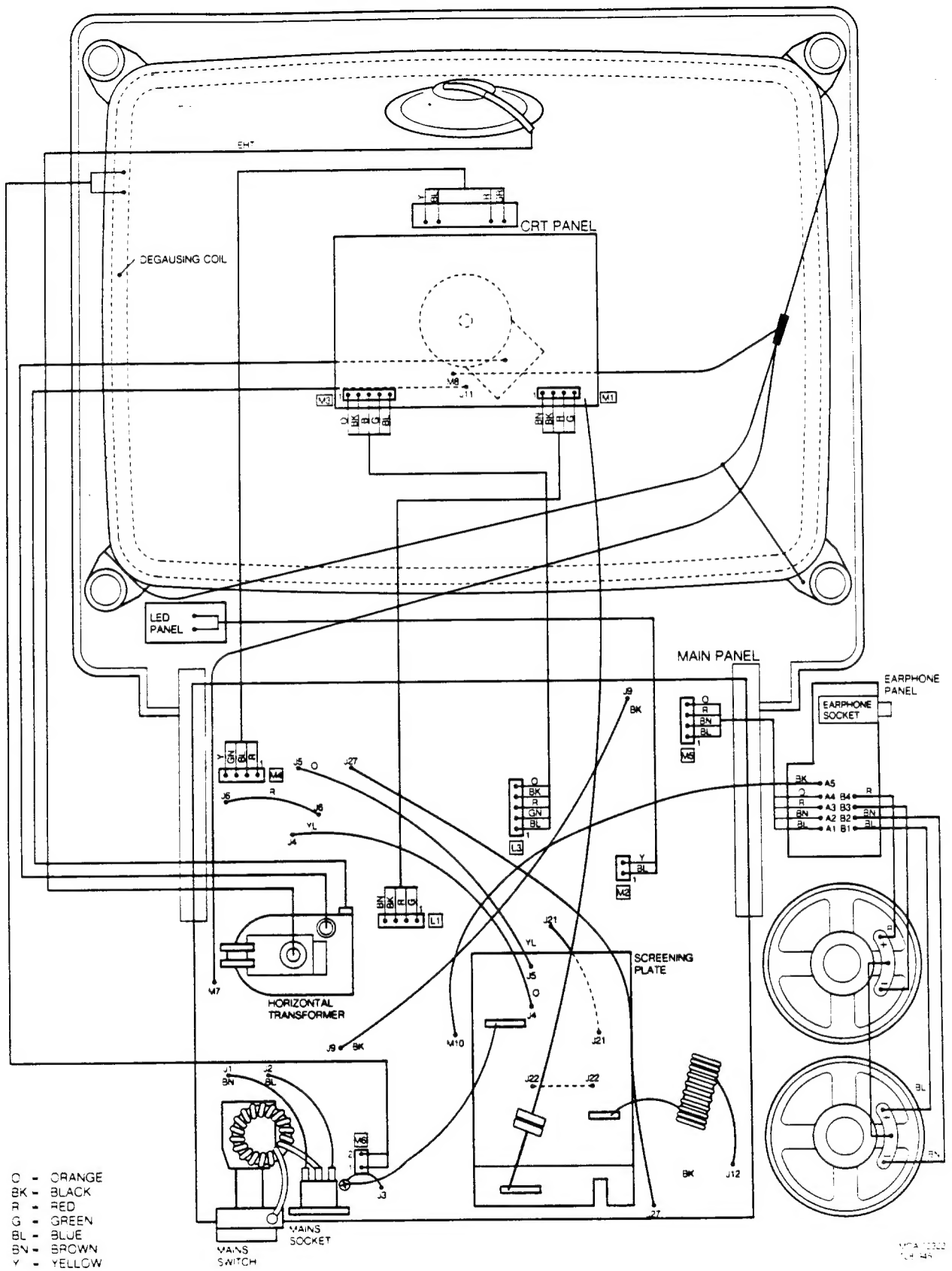


Fig. 5d

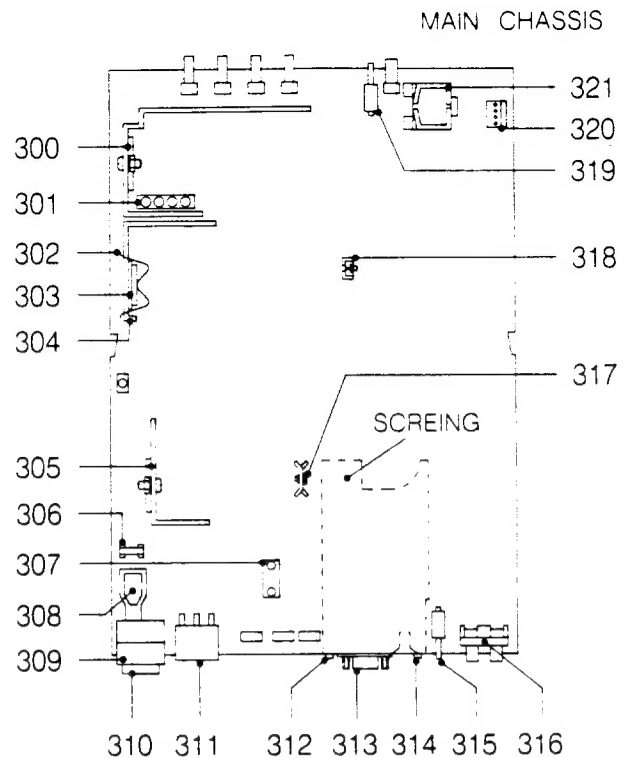
WIRING DIAGRAM





MAIN CHASSIS PANEL

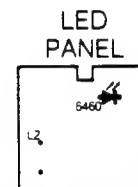
Mechanical parts

300	4822 390 20011	Silicon grease
301	4822 265 30375	Connector
302	4822 492 62076	Spring
303	4822 255 40893	Insulation plate
304	4822 390 20011	Silicon grease
305	4822 390 20011	Silicon grease
306	4822 492 60063	Fuse holder
307	4822 267 40646	Socket
308	4822 276 12445	Power switch (SK1)
309	4822 256 91564	Holder
310	4822 410 60456	Power push button
311	4822 265 30752	Mains socket
312	4822 276 12677	Switch (TTL/analog, SK4)
313	4822 267 40893	"D" SHELL socket (BU3)
314	4822 276 15505	Switch (RGB/CVBS, SK2)
315	4822 276 11505	Switch (LCA/CVBS, SK5)
316	4822 267 40894	Socket (BU1, BU2, BU4, BU5)
317	4822 390 20011	Silicon grease
318	4822 265 20235	Connector
319	4822 276 11505	Switch (SK3)
320	4822 265 30408	Connector
321	4822 390 20011	Silicon grease
	4822 535 30095	EYE LET (1,89x0,18x2,29)
	4822 535 30096	EYE LET (1,52x0,18x2,23)






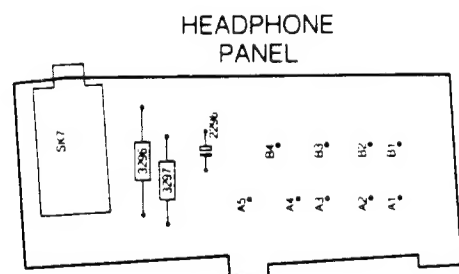
LED PANEL

4822 212 23302		LED panel complete
		
3460	4822 116 52391	1K 0,5W 5%
		
6460	4822 130 81701	LED GREEN



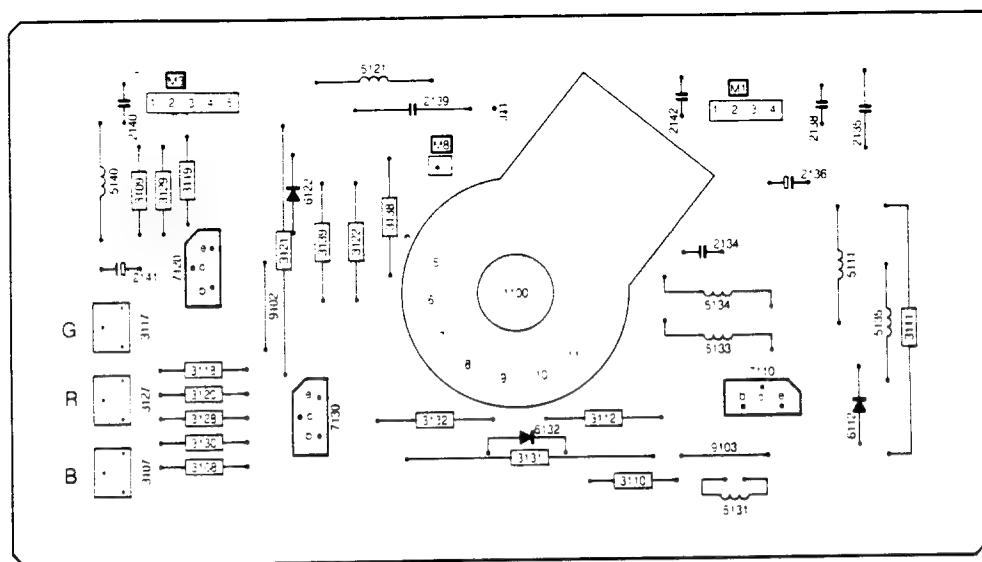
HEADPHONE PANEL

4822 212 23312		Headphone panel complete
4822 267 31144		Socket for headphone
		
4822 265 30778		Connector assy
		
2296	4822 124 22681	ELCO 47μF 16V 20%
		
3296	4822 116 52389	100Ω 0,5W 5%
3297	4822 116 52389	100Ω 0,5W 5%









Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified be used.





CRT PANEL



ELECTRICAL PARTS CRT PANEL

					
2134	4822 122 33646	470pF 10% 500V	3130	4822 116 52391	1k 5% 0.5W
2135	4822 121 41677	10nF 10% 400V	3131	4822 116 82126	3k9 3W
2136	4822 124 22023	4.7μF 200V	3132	4822 116 53423	470Ω 1% 0.6W
2138	4822 122 33966	10nF 10% 50V	3138	4822 116 80547	1k5 5% 0.5W
2139	4822 121 41926	33nF 5% 630V	3139	4822 116 80547	1k5 5% 0.5W
2140	4822 122 33966	10nF 10% 50V			
2141	4822 124 23129	22μF 20% 50V			
2142	5322 122 32332	1.5nF 10% 100V			
			5111 4822 157 60485		
3107	5322 100 11542	4k7 TRIM LINEAR	5121	4822 157 60485	
3108	4822 116 52391	1k 5% 0.5W	5131	4822 157 60485	
3109	4822 116 52367	47Ω 5% 0.5W	5133	4822 152 20587	7.5μH
3110	4822 116 52391	1k 5% 0.5W	5134	4822 152 20587	7.5μH
3111	4822 116 82126	3k9 3W	5135	4822 157 60483	
3112	4822 116 53423	470Ω 1% 0.6W	5140	4822 157 60483	
3117	5322 100 11542	4k7 TRIM LINEAR			
3118	4822 116 52391	1k 5% 0.5W			
3119	4822 116 52367	47Ω 5% 0.5W			
3120	4822 116 52391	1k 5% 0.5W	6112	4822 130 30842	BAV21
3121	4822 116 82126	3k9 3W	6122	4822 130 30842	BAV21
3122	4822 116 53423	470Ω 1% 0.6W	6132	4822 130 30842	BAV21
3127	5322 100 11542	4k7 TRIM LINEAR			
3128	4822 116 52391	1k 5% 0.5W			
3129	4822 116 52367	47Ω 5% 0.5W			
			7110	4822 130 41773	BF869
			7120	4822 130 41773	BF869
			7130	4822 130 41773	BF869





ELECTRICAL PARTS MAIN CHASSIS

					
1401	4822 253 30025	T2A	2441	4822 122 33645	220pF 500V
			2442	4822 122 33645	220pF 500V
1627	4822 242 70304	8.867 238 MHz	2443	4822 122 33645	220pF 500V
			2444	4822 122 33645	220pF 500V
2251	4822 121 50994	100 nF 100V	2445	4822 124 41865	470μF 20% 35V
2258	4822 121 51258	2.7nF 500V	2446	4822 124 22357	470μF 25V
2261	4822 121 42636	150nF 10% 63V	2447	4822 124 22357	470μF 25V
2262	4822 121 50994	100 nF 100V	2450	4822 124 23131	10μF 20% 50V
2264	4822 122 31125	4.7nF 80% 63V	2451	4822 124 41281	47 μF 200V
2266	4822 124 41659	4.7μF 20% 25V	2452	4822 124 23129	22μF 50V
2267	4822 121 50994	100 nF 100V	2510	4822 122 33969	27pF 5% 500V
2268	4822 124 22669	1μF 20% 50V	2511	4822 124 22672	2.2μF 20% 63V
2269	4822 124 23129	22μF 20% 50V	2512	4822 124 23129	22μF 20% 50V
2270	5322 122 32343	47pF 2% 100V	2514	4822 122 40427	2kV 470pF
2272	4822 124 23129	22μF 20% 50V	2515	4822 124 41867	1μF 20% 250V
2273	4822 122 30103	22nF 80% 63V	2517	4822 121 43061	8.2nF 5% 1.6kV
2274	4822 124 22678	100μF 20% 16V	2518	4822 121 43392	22nF 10%
2275	4822 122 33966	10nF 10% 50V	2519	4822 121 43511	560nF 10% 250V
2289	4822 121 50994	100 nF 100V	2520	4822 124 22499	10μF 160V
2290	4822 122 30027	1nF 10% 100V	2524	4822 124 90034	4MU7 50V
2291	5322 124 10623	1000μF 20% 16V	2526	4822 124 22669	1μF 20% 50V
2292	4822 121 50994	100 nF 100V	2531	4822 121 41879	120nF 10% 100V
2294	4822 121 50994	100 nF 100V	2532	4822 122 33966	10nF 10% 50V
2295	4822 122 30027	1nF 10% 100V	2536	4822 124 22669	1μF 20% 50V
2301	4822 124 23129	22μF 20% 50V	2537	4822 124 23129	22μF 20% 50V
2302	4822 122 30103	22nF 80% 63V	2540	4822 122 33645	220pF 500V
2303	5322 122 32143	22pF 100V	2541	4822 124 23129	22μF 20% 50V
2304	4822 121 42637	220nF 20% 63V	2543	4822 121 41925	15nF 10% 100V
2305	4822 122 30057	2.7nF 10% 100V	2544	4822 121 40336	47nF 10% 250V
2307	4822 122 32185	10pF 2% 100V	2547	4822 124 22672	2.2μF 20% 63V
2319	4822 122 33966	10nF 10% 50V	2554	4822 122 31125	4.7nF 80% 63V
2320	4822 122 30103	22nF 80% 63V	2555	4822 122 31125	4.7nF 80% 63V
2327	4822 124 23129	22μF 20% 50V	2556	5322 122 32052	680pF 10% 100V
2328	4822 124 23129	22μF 20% 50V	2560	5322 124 41431	22μF 20% 35V
2350	4822 122 33643	100pF 10% 50V	2561	5322 124 41431	22μF 20% 35V
2360	4822 122 31353	330pF 2% 100V	2563	4822 124 41865	470μF 20% 35V
2361	4822 124 23131	10μF 20% 50V	2571	4822 124 41866	680μF 20% 35V
2363	4822 122 30103	22nF 80% 63V	2573	4822 124 41975	1.5μF 63V
2365	4822 122 30103	22nF 80% 63V	2575	4822 121 50994	100nF 100V
2368	4822 122 33645	220pF 500V	2601	4822 124 22678	100μF 20% 16V
2369	4822 126 10453	3.3nF 50V	2602	4822 122 30103	22nF 80% 63V
2370	4822 122 30103	22nF 80% 63V	2603	4822 122 30027	1nF 10% 100V
2402	5322 121 44212	1μF 10% 275B	2604	4822 124 22669	1μF 20% 50V
2403	4822 122 33652	2.2nF 20% 400V	2605	4822 121 41681	470nF 10% 40V
2404	4822 122 33652	2.2nF 20% 400V	2606	4822 121 41676	47nF 10% 250V
2405	4822 121 43385	47nF 20% 250V	2607	4822 121 50994	100nF 100V
2406	4822 121 41984	47nF 10% 400V	2608	4822 121 50994	100nF 100V
2407	4822 122 40348	2.2μF 1kV	2609	4822 122 31823	15pF 2% 100V
2408	4822 122 32154	2.2nF 10% 1kV	2610	4822 122 31056	12pF 2% 100V
2409	4822 122 40348	2.2μF 1kV	2611	4822 122 33966	10nF 10% 50V
2410	4822 122 40348	2.2μF 1kV	2612	4822 121 41681	470nF 10% 40V
2412	4822 124 21722	100μF 50% 400V	2613	4822 125 50088	27pF Trimmer
2416	4822 124 23131	10μF 20% 50V	2614	4822 122 33966	10nF 10% 50V
2417	4822 122 33966	10nF 10% 50V	2616	4822 122 30103	22nF 80% 63V
2422	4822 124 22669	1μF 20% 50V	2617	4822 122 30103	22nF 80% 63V
2423	4822 121 50994	100nF 100V	2618	4822 121 42637	220nF 20% 63V
2424	4822 121 41925	15nF 10% 100V	2640	4822 124 22678	100μF 20% 16V
2429	4822 121 42637	220nF 20% 63V	2641	4822 122 30103	22nF 80% 63V
2431	5322 122 32818	2.2nF 10% 100V	2642	4822 122 30103	22nF 80% 63V
2432	4822 121 50966	2.2nF 20% 1kV	2643	4822 122 30103	22nF 80% 63V
2433	4822 121 41984	47nF 10% 400V	2644	4822 122 30103	22nF 80% 63V
			2645	4822 121 50992	330nF 10% 63V
			2646	4822 121 50992	330nF 10% 63V
			2647	4822 124 41659	4.7μF 20% 25V
			2648	4822 122 30103	22nF 80% 63V
			2649	4822 121 50992	330nF 10% 63V



ELECTRICAL PARTS MAIN CHASSIS

II			□		
2651	4822 122 30103	22nF 80% 63V	3341	4822 116 52391	1k 5% 0.5W
2652	4822 121 50994	100nF 100V	3342	4822 116 52391	1k 5% 0.5W
2653	4822 121 50994	100nF 100V	3344	4822 116 52846	150Ω 1% 0.6W
2654	4822 121 50994	100nF 100V	3345	4822 116 52416	330Ω 5% 0.5W
2669	4822 124 23131	10μF 20% 50V	3346	4822 116 52416	330Ω 5% 0.5W
2673	5322 122 34148	330pF 2% 100V	3347	4822 116 52389	100Ω 5% 0.5W
2682	5322 122 34148	330pF 2% 100V	3350	4822 116 52465	27k 5% 0.5W
2688	5322 122 34148	330pF 2% 100V	3351	4822 116 52452	10k 5% 0.5W
2695	4822 122 30103	22nF 80% 63V	3352	4822 116 52425	470Ω 5% 0.5W
2696	4822 124 22681	47μF 20% 16V	3353	4822 116 52389	100Ω 5% 0.5W
2697	4822 124 22681	47μF 20% 16V	3360	4822 116 52391	1k 5% 0.5W
□			3361	4822 116 52391	1k 5% 0.5W
3257	4822 100 11319	4k7 pot.m.	3362	4822 116 52509	220k 5% 0.5W
3258	4822 116 52467	33k 5% 0.5W	3363	4822 116 52417	3k3 5% 0.5W
3261	4822 116 53083	15k 1% 0.6W	3364	4822 116 53025	2k2 1% 0.6W
3262	4822 116 52426	4k7 5% 0.5W	3365	4822 116 52509	220k 5% 0.5W
3263	4822 116 52463	22k 5% 0.5W	3368	4822 116 52456	12k 5% 0.5W
3264	4822 100 90079	10k pot.m.	3369	4822 116 52472	47k 5% 0.5W
3266	4822 116 52399	1k5 5% 0.5W	3370	4822 116 52441	6k8 5% 0.5W
3268	4822 116 52441	6k8 5% 0.5W	3404	4822 116 40161	DUAL PTC
3269	4822 116 52389	100Ω 5% 0.5W	3410	4822 113 80466	4Ω7 10% 7W
3271	4822 116 52502	1M5 5% 0.5W	3411	4822 116 52463	22k 5% 0.5W
3272	4822 116 52425	470Ω 5% 0.5W	3412	4822 116 52467	33k 5% 0.5W
3273	4822 111 30499	4Ω7 5% 0.33W	3413	4822 116 52413	2k7 5% 0.5W
3274	4822 116 52452	10k 5% 0.5W	3414	4822 100 11348	1k 30% LIN
3288	4822 116 52463	22k 5% 0.5W	3415	4822 116 52413	2k7 5% 0.5W
3289	4822 116 52463	22k 5% 0.5W	3416	4822 116 52426	4k7 5% 0.5W
3293	4822 116 52463	22k 5% 0.5W	3417	4822 116 52416	330Ω 5% 0.5W
3294	4822 116 52463	22k 5% 0.5W	3420	4822 116 52302	750k 5% 0.5W
3295	4822 100 90082	20k pot.m.	3421	4822 116 52302	750k 5% 0.5W
3298	4822 100 11392	47k LIN, pot.m.	3422	4822 116 52846	150Ω 1% 0.6W
3301	4822 116 52463	22k 5% 0.5W	3425	4822 116 52412	270Ω 5% 0.5W
3302	4822 116 52452	10k 5% 0.5W	3426	5322 116 53734	24Ω 5% 0.5W
3303	5322 116 53339	75Ω 1% 0.6W	3427	4822 116 52417	3k3 5% 0.5W
3304	4822 116 52425	470Ω 5% 0.5W	3428	4822 116 52422	3k9 5% 0.5W
3306	4822 116 52391	1k 5% 0.5W	3429	4822 116 82128	100Ω 5% 1W
3307	4822 116 52428	560Ω 5% 0.5W	3430	4822 116 82128	100Ω 5% 1W
3308	4822 116 53025	2k2 1% 0.6W	3431	4822 116 82128	100Ω 5% 1W
3309	4822 116 53025	2k2 1% 0.6W	3432	4822 116 80388	22k 5W
3311	5322 116 53339	75Ω 1% 0.6W	3436	4822 116 52184	18Ω 5% 0.5W
3315	4822 116 53025	2k2 1% 0.6W	3443	4822 111 30487	1Ω5 5% 0.33W
3316	4822 116 53025	2k2 1% 0.6W	3451	4822 111 30499	4Ω7 5% 0.33W
3317	4822 116 53025	2k2 1% 0.6W	3452	4822 116 52391	1k 5% 0.5W
3318	4822 116 53025	2k2 1% 0.6W	3460	4822 116 52391	1K 5% 0.5W
3319	4822 116 52391	1k 5% 0.5W	3470	4822 116 52389	100Ω 5% 0.5W
3320	4822 111 30487	1Ω5 5% 0.33W	3509	4822 116 52849	220Ω 1% 0.6W
3321	4822 116 52416	330Ω 5% 0.5W	3510	4822 116 53025	2k2 1% 0.6W
3322	4822 116 52416	330Ω 5% 0.5W	3511	4822 116 60239	1k 2W
3323	4822 116 52425	470Ω 5% 0.5W	3512	4822 111 30499	4Ω7 5% 0.33W
3324	4822 116 52416	330Ω 5% 0.5W	3513	4822 113 60185	2.2Ω 2W
3325	4822 116 52416	330Ω 5% 0.5W	3514	4822 116 52375	68Ω 5% 0.5W
3326	4822 116 52416	330Ω 5% 0.5W	3515	4822 116 52467	33k 5% 0.5W
3327	4822 116 52425	470Ω 5% 0.5W	3520	4822 113 80465	10Ω 5% 5W
3328	4822 116 52849	220Ω 1% 0.6W	3522	4822 116 52253	2k 5% 0.5W
3329	4822 116 52452	10k 5% 0.5W	3523	4822 116 52253	2k 5% 0.5W
3330	4822 111 30499	4Ω7 5% 0.33W	3526	4822 111 30499	4Ω7 5% 0.33W
3331	4822 116 52941	430Ω 1% 0.6W	3530	4822 116 53025	2k2 1% 0.6W
3332	4822 116 52941	430Ω 1% 0.6W	3531	4822 116 52472	47k 5% 0.5W
3333	4822 116 52941	430Ω 1% 0.6W	3533	4822 116 52453	100k 5% 0.5W
3334	4822 116 52941	430Ω 1% 0.6W	3534	4822 101 10547	10k 20% 0.25W
3335	4822 116 52425	470Ω 5% 0.5W	3536	4822 116 52472	47k 5% 0.5W
3336	4822 116 52389	100Ω 5% 0.5W	3537	4822 100 11585	22k LIN
3337	5322 116 53339	75Ω 1% 0.6W	3540	4822 111 30487	1Ω5 5% 0.33W
3340	4822 116 52391	1k 5% 0.5W	3541	4822 116 52367	47Ω 5% 0.5W
			3543	4822 116 52527	470k 5% 0.5W

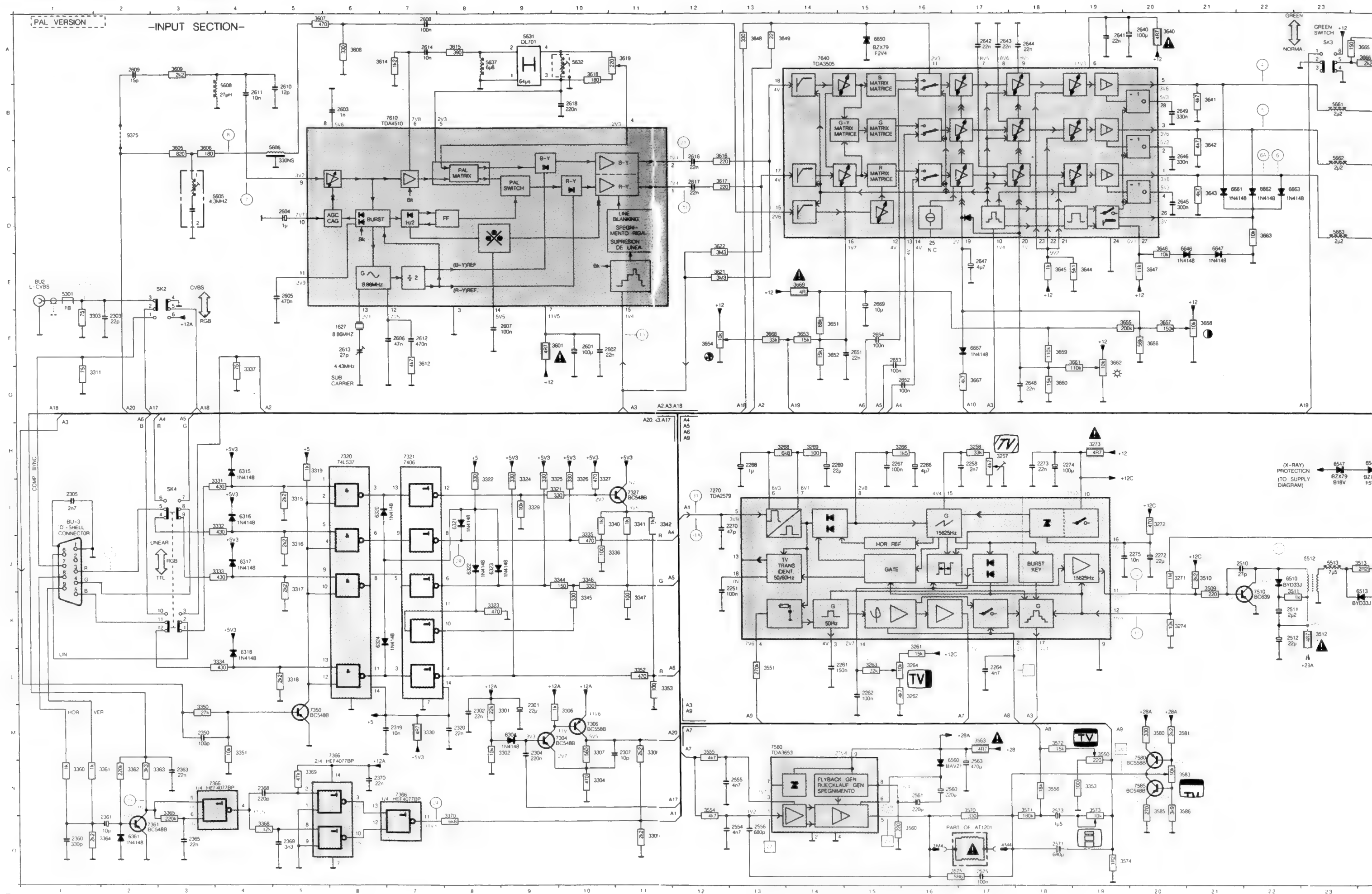
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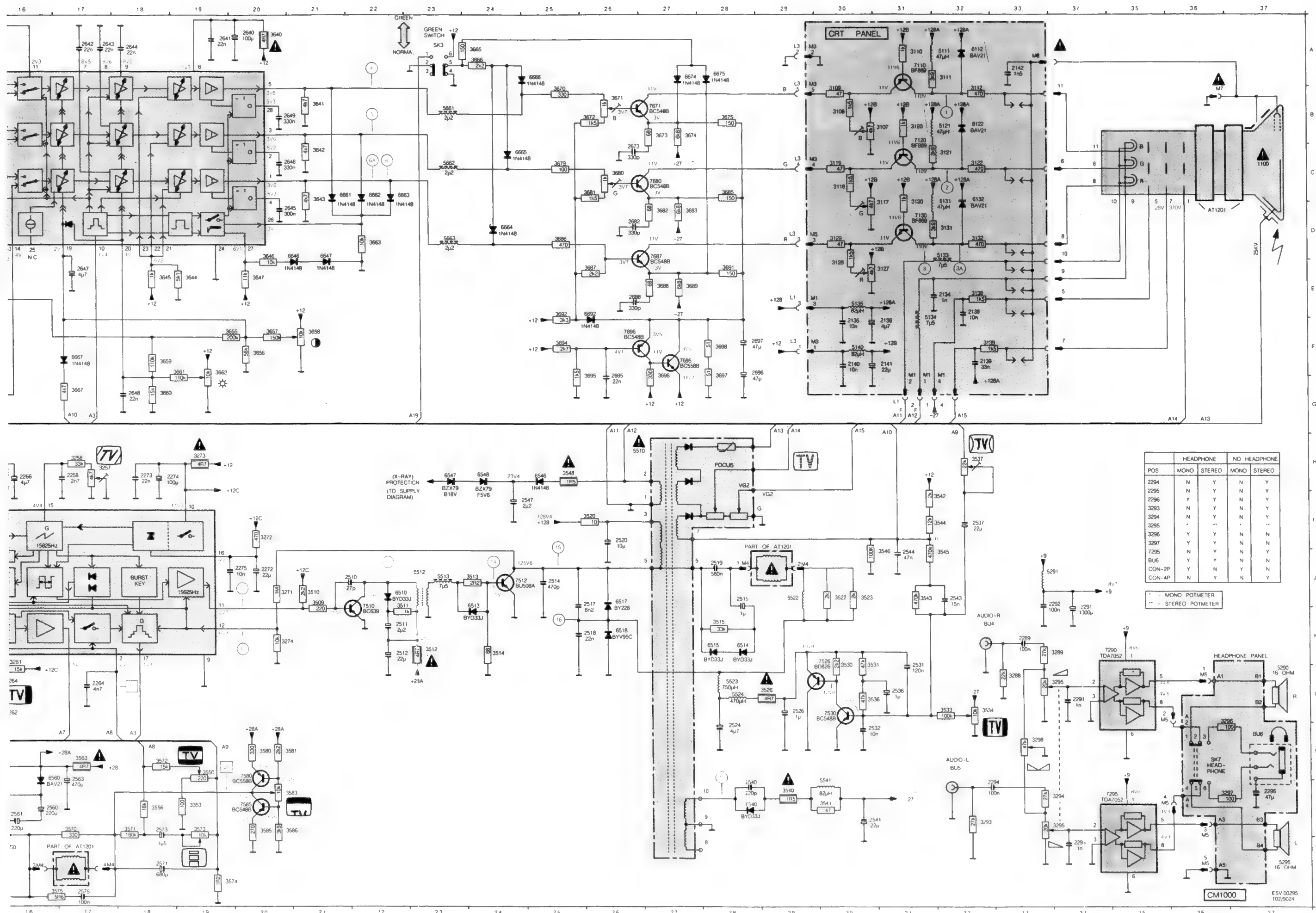
					
3544	4822 116 53083	15k 1% 0.6W	3666	4822 116 53025	2k2 1% 0.6W
3545	4822 116 52527	470k 5% 0.5W	3667	4822 116 52426	4k7 5% 0.5W
3546	4822 116 52453	100k 5% 0.5W	3668	4822 116 52467	33k 5% 0.5W
3548	4822 111 30487	1Ω 5% 0.33W	3669	4822 111 30499	4Ω 7 5% 0.33W
3550	4822 100 10915	220k pot.m.	3670	4822 116 52389	100Ω 5% 0.5W
3551	4822 116 53798	270k 1% 0.6W	3671	4822 105 11023	1k 30% 0.1W
3553	4822 116 52389	100Ω 5% 0.5W	3672	4822 116 52399	1k5 5% 0.5W
3554	4822 116 52426	4k7 5% 0.5W	3673	4822 116 52375	68Ω 5% 0.5W
3555	4822 116 52426	4k7 5% 0.5W	3674	4822 116 52441	6k8 5% 0.5W
3556	4822 116 52461	18k 1% 0.6W	3675	4822 116 52846	150Ω 1% 0.6W
3560	4822 116 52215	220Ω 5% 0.5W	3679	4822 116 52389	100Ω 5% 0.5W
3563	4822 111 30499	4Ω 7 5% 0.33W	3680	4822 105 11023	1k 30% 0.1W
3570	4822 116 52416	330Ω 5% 0.5W	3681	4822 116 52399	1k5 5% 0.5W
3571	5322 116 53729	180k 1% 0.6W	3682	4822 116 52375	68Ω 5% 0.5W
3572	4822 116 53083	15k 1% 0.6W	3683	4822 116 52441	6k8 5% 0.5W
3573	4822 100 11141	10k pot.m.	3685	4822 116 52846	150Ω 1% 0.6W
3574	5322 116 53283	1Ω 2 1% 0.6W	3686	4822 116 52425	470Ω 5% 0.5W
3575	4822 116 52532	560k 5% 0.5W	3687	4822 116 53025	2k2 1% 0.6W
3580	4822 116 52416	330Ω 5% 0.5W	3688	4822 116 52375	68Ω 5% 0.5W
3581	4822 116 53025	2k2 1% 0.6W	3689	4822 116 52441	6k8 5% 0.5W
3583	4822 101 10547	10k 20% 0.25W	3691	4822 116 52846	150Ω 1% 0.6W
3585	4822 116 52412	270Ω 5% 0.5W	3692	4822 116 52417	3k3 5% 0.5W
3586	4822 116 52422	3k9 5% 0.5W	3694	4822 116 52413	2k7 5% 0.5W
3601	4822 111 30499	4Ω 7 5% 0.33W	3695	4822 116 52399	1k5 5% 0.5W
3602	5322 116 53339	75Ω 1% 0.6W	3696	4822 116 52416	330Ω 5% 0.5W
3603	4822 116 52463	22k 5% 0.5W	3697	4822 116 52196	51Ω 5% 0.5W
3604	4822 116 52452	10k 5% 0.5W	3698	4822 116 52196	51Ω 5% 0.5W
3605	4822 116 52433	820Ω 5% 0.5W			
3606	4822 116 52403	180Ω 5% 0.5W			
3607	4822 116 52425	470Ω 5% 0.5W			
3608	4822 116 52416	330Ω 5% 0.5W			
3609	4822 116 53025	2k2 1% 0.6W			
3612	4822 116 52426	4k7 5% 0.5W			
3614	4822 116 52395	1k2 5% 0.5W			
3615	4822 116 52421	390Ω 5% 0.5W			
3616	4822 116 52849	220Ω 1% 0.6W			
3617	4822 116 52849	220Ω 1% 0.6W			
3618	4822 116 52403	180Ω 5% 0.5W			
3619	4822 100 11562	220Ω 30%			
3620	4822 116 52452	10k 5% 0.5W			
3621	5322 116 53737	3M3 1% 0.6W			
3622	5322 116 53737	3M3 1% 0.6W			
3640	4822 111 30499	4Ω 7 5% 0.33W			
3641	4822 116 52426	4k7 5% 0.5W			
3642	4822 116 52426	4k7 5% 0.5W			
3643	4822 116 52426	4k7 5% 0.5W			
3644	4822 116 52437	5k1 5% 0.5W			
3645	4822 116 52391	1k 5% 0.5W			
3646	4822 116 52452	10k 5% 0.5W			
3647	4822 116 52454	11k 5% 0.5W			
3648	4822 116 52416	330Ω 5% 0.5W			
3649	5322 116 53479	22Ω 1% 0.6W			
3651	4822 116 52476	68k 5% 0.5W			
3652	4822 116 53083	15k 1% 0.6W			
3653	4822 116 53083	15k 1% 0.6W			
3654	4822 100 90079	10k pot.m.			
3655	4822 116 52848	200k 1% 0.6W			
3656	4822 116 52923	56k 1% 0.6W			
3657	4822 116 53547	150k 1% 0.6W			
3658	4822 100 90081	10k pot.m.			
3659	4822 116 53547	150k 1% 0.6W			
3660	4822 116 53083	15k 1% 0.6W			
3661	4822 116 52455	110k 5% 0.5W			
3662	4822 100 90081	10k pot.m.			
3663	4822 116 52452	10k 5% 0.5W			
3665	4822 116 52389	100Ω 5% 0.5W			
					
			6304	4822 130 30621	1N4148
			6315	4822 130 30621	1N4148
			6316	4822 130 30621	1N4148
			6317	4822 130 30621	1N4148
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			6322	4822 130 30621	1N4148
			6323	4822 130 30621	1N4148
			6324	4822 130 30621	1N4148
			6328	4822 130 34167	BZX79-B6V2
			6329	4822 130 30621	1N4148

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6361	4822 130 30621	1N4148	7270	4822 209 72363	TDA2579A/N8
6407	4822 130 31933	1N5061	7290	4822 209 60956	TDA7052/N1
6408	4822 130 31933	1N5061	7295	4822 209 60956	TDA7052/N1
6409	4822 130 31933	1N5061	7304	4822 130 40938	BC548
6410	4822 130 31933	1N5061	7306	4822 130 44197	BC558B
6415	4822 130 34167	BZX79-B6V2	7320	4822 209 80916	N74LS37N
6421	4822 130 30621	1N4148	7321	5322 209 86327	N7406N
6425	4822 130 30621	1N4148	7327	4822 130 40938	BC548
6426	4822 130 30621	1N4148	7328	4822 130 41344	BC337-40
6427	4822 130 30621	1N4148	7350	4822 130 40938	BC548
6428	4822 130 80227	BZX79-C9V1	7361	4822 130 44196	BC548C
6429	4822 130 30621	1N4148	7366	4822 209 10223	HEF4077BP
6430	4822 130 30621	1N4148	7401	4822 209 71634	TCDT1101G
6431	4822 130 30621	1N4148	7417	4822 130 40937	BC548B
6432	4822 130 30621	1N4148	7421	4822 130 41344	BC337-40
6433	4822 130 34174	BZX79-C4V7	7432	4822 130 42679	BUT11AF
6434	4822 130 80216	1N5062	7450	4822 209 81726	MC7812CT
6435	4822 130 80216	1N5062	7452	5322 130 24081	BT151-500R
6440	4822 130 32833	RGP15k	7470	4822 130 44197	BC558B
6441	4822 130 32833	RGP15k	7510	4822 130 41053	BC639
6442	4822 130 42606	BYD33J	7512	4822 130 61265	BU508AF
6443	5322 130 31971	RGP15D	7526	4822 130 41774	BD826
6444	5322 130 31971	RGP15D	7530	4822 130 40937	BC548B
6452	4822 130 34281	BZX79-F15	7560	4822 209 60955	TDA3653B/N1
6453	4822 130 42606	BYD33J	7580	4822 130 44197	BC558B
6454	4822 130 34281	BZX79-F15	7585	4822 130 40937	BC548B
6470	4822 130 34167	BZX79-B6V2	7603	4822 130 40937	BC548B
6510	4822 130 42606	BYD33J	7610	4822 209 70019	TDA4510/V2
6513	4822 130 42606	BYD33J	7640	4822 209 71971	TDA3505/V4
6514	4822 130 42606	BYD33J	7671	4822 130 40937	BC548B
6515	4822 130 42606	BYD33J	7680	4822 130 40937	BC548B
6517	4822 130 41275	BY228	7687	4822 130 40937	BC548B
6518	4822 130 41487	BYV95C	7695	4822 130 44197	BC558B
6540	4822 130 42606	BYD33J	7696	4822 130 40937	BC548B
6546	4822 130 30621	1N4148			
6547	4822 130 34281	BZX79-F15			
6548	4822 130 80239	BZX79-F8V2			
6560	4822 130 30842	BAV21			
6646	4822 130 30621	1N4148			
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6650	4822 130 80655	BZX79-F2V4			
6661	4822 130 30621	1N4148			
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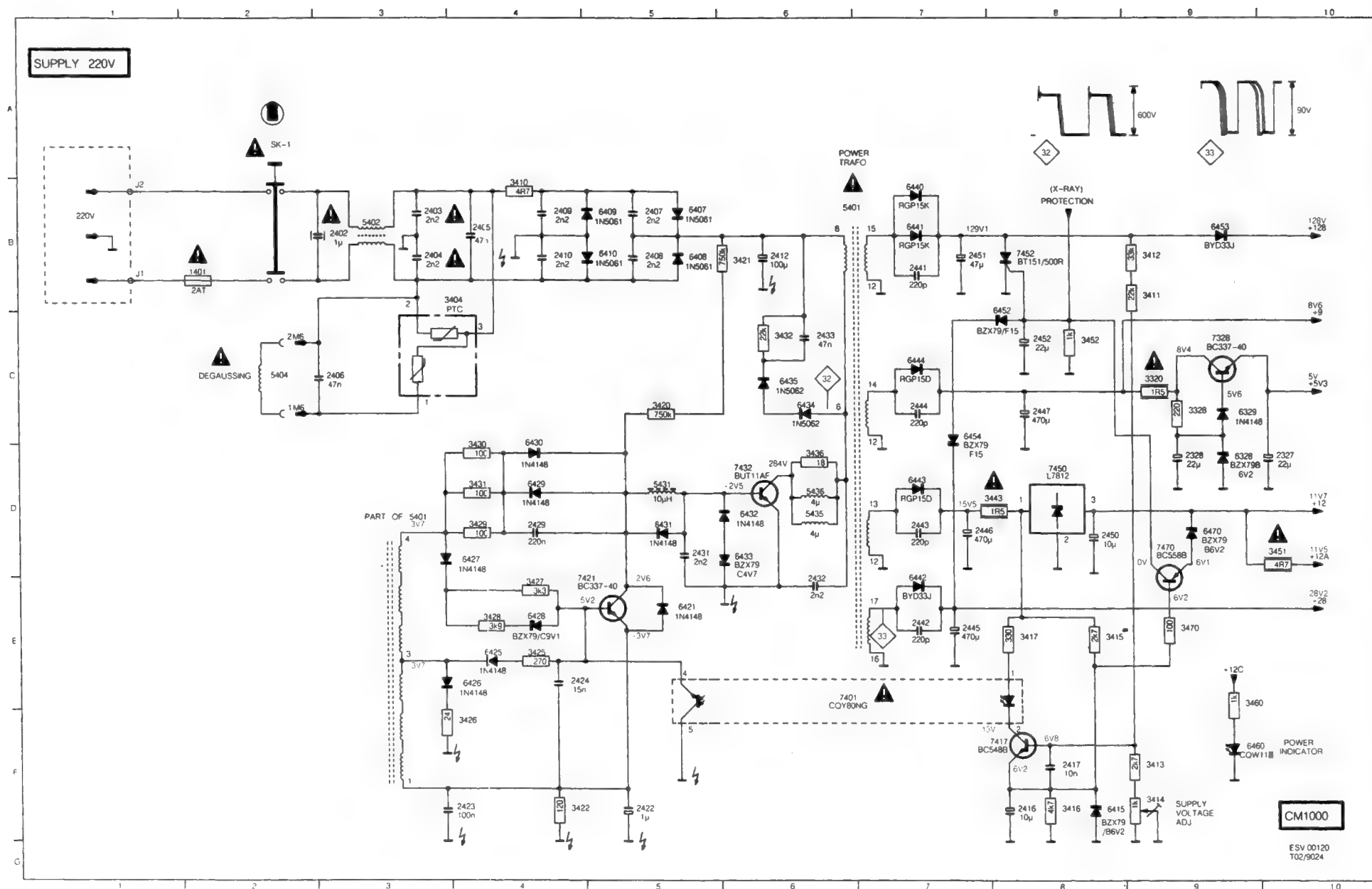
MAIN CIRCUIT DIAGRAM (signal part)





BU2 E1	3269 H14	3667 G17
BU4 K32	3271 J20	3668 F13
BU5 K32	3272 I20	3669 F14
SK4 E3	3273 H19	3670 B25
SK4 A23	3274 K20	3671 B26
SK4 I3	3288 L33	3672 B26
SK7 M36	3289 K34	3673 B27
1627 F6	3293 F6	3674 B27
1334 E32	3294 N34	3675 B28
2135 F30	3295 L34	3676 C25
2136 F31	3295 N34	3680 C26
2138 E32	3296 M36	3681 C26
2139 F32	3297 N36	3682 D27
2140 F30	3298 M33	3683 D27
2141 F31	3301 M3	3685 C28
2142 A33	3302 M3	3686 D25
2251 J13	3303 F1	3687 E26
2258 H17	3304 N10	3688 E27
2261 L14	3306 M10	3689 E27
2262 L15	3307 M10	3691 E28
2264 L17	3308 M1	3692 E25
2266 H16	3309 O11	3694 F25
2267 H15	3311 G1	3695 G26
2268 H13	3315 I5	3696 G27
2269 H14	3316 J5	3697 G28
2270 I13	3317 J5	3698 F28
2272 J20	3318 L5	3699 J24
2273 H18	3319 H5	3700 B32
2274 H18	3321 I10	3701 D32
2275 J20	3322 I8	3702 D32
2289 K33	3323 K8	3703 F34
2290 L34	3324 I9	3704 E30
2291 K34	3325 I10	3705 F30
2292 J33	3326 I10	3706 J37
2294 N32	3327 I10	3707 J34
2295 O34	3329 I9	3708 O37
2296 N37	3330 M7	3709 E1
2301 M3	3331 I4	3710 H26
2302 M3	3332 I4	3711 E23
2303 F2	3333 J4	3712 J23
2304 M3	3334 L4	3713 J29
2305 I1	3335 J10	3714 L28
2307 M11	3336 J11	3715 L28
2319 M7	3337 G4	3716 N30
2320 M3	3340 I11	3717 D4
2321 M3	3341 I11	3718 C5
2322 M3	3342 I11	3719 B4
2323 M3	3343 J10	3720 A9
2324 M3	3344 K10	3721 A10
2325 M3	3345 K11	3722 B23
2326 M3	3346 K11	3723 B23
2327 M3	3347 K11	3724 B23
2328 M3	3348 K11	3725 B23
2329 M3	3349 K11	3726 B23
2330 M3	3350 K11	3727 B23
2331 M3	3351 K11	3728 B23
2332 M3	3352 K11	3729 B23
2333 M3	3353 K11	3730 B23
2334 M3	3354 K11	3731 B23
2335 M3	3355 K11	3732 B23
2336 M3	3356 K11	3733 B23
2337 M3	3357 K11	3734 B23
2338 M3	3358 K11	3735 B23
2339 M3	3359 K11	3736 B23
2340 M3	3360 K11	3737 B23
2341 M3	3361 K11	3738 B23
2342 M3	3362 K11	3739 B23
2343 M3	3363 K11	3740 B23
2344 M3	3364 K11	3741 B23
2345 M3	3365 K11	3742 B23
2346 M3	3366 K11	3743 B23
2347 M3	3367 K11	3744 B23
2348 M3	3368 K11	3745 B23
2349 M3	3369 K11	3746 B23
2350 M3	3370 K11	3747 B23
2351 M3	3371 K11	3748 B23
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2353 M3	3373 K11	3750 B23
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2356 M3	3376 K11	3753 B23
2357 M3	3377 K11	3754 B23
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2370 M3	3390 K11	3767 B23
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2375 M3	3395 K11	3772 B23
2376 M3	3396 K11	3773 B23
2377 M3	3397 K11	3774 B23
2378 M3	3398 K11	3775 B23
2379 M3	3399 K11	3776 B23
2380 M3	3400 K11	3777 B23

POWER SUPPLY CIRCUIT DIAGRAM (on main panel)



- 1401-B2
- 2327-D10
- 2328-D9
- 2402-B3
- 2403-B3
- 2404-B3
- 2405-B4
- 2406-C3
- 2407-B5
- 2408-B5
- 2409-B4
- 2410-B4
- 2412-B6
- 2416-F8
- 2417-F8
- 2422-F5
- 2423-F3
- 2424-E4
- 2429-D4
- 2431-D5
- 2432-E5
- 2433-C6
- 2441-B7
- 2442-E7
- 2443-D7
- 2444-C7
- 2445-E7
- 2446-D7
- 2447-C8
- 2450-D8
- 2451-B7
- 2452-C8
- 3320-C9
- 3328-C9
- 3404-C3
- 3410-B4
- 3411-B9
- 3412-B9
- 3413-F9
- 3414-F9
- 3415-E8
- 3416-F8
- 3417-E8
- 3420-C5
- 3421-B6
- 3422-F4
- 3425-E4
- 3426-E3
- 3427-E4
- 3428-E4
- 3429-D4
- 3430-D4
- 3431-D4
- 3432-C6
- 3436-D6
- 3443-D7
- 3451-D10
- 3452-C8
- 3460-E9
- 3470-E9
- 5401-B6
- 5401-C7
- 5401-E3
- 5402-B3
- 5404-C2
- 5431-D5
- 5435-D6
- 5436-D6
- 6328-C9
- 6329-C9
- 6407-B5
- 6408-B5
- 6409-B5
- 6410-B5
- 6415-F8
- 6421-E5
- 6425-E4
- 6426-F3
- 6427-E3
- 6428-E4
- 6429-D4
- 6430-D4
- 6431-D5
- 6432-D5
- 6433-E6
- 6434-C6
- 6435-C6
- 6440-B7
- 6441-B7
- 6442-E7
- 6443-D7
- 6444-C7
- 6452-C7
- 6453-B9
- 6454-D7
- 6460-F9
- 6470-D9
- 7328-D9
- 7401-E5
- 7417-F8
- 7421-E5
- 7432-D6
- 7450-D8
- 7452-B8
- 7470-F9
- J1-B1
- J2-B1
- M5-C2
- SK-1-B2

GB REMARKS

- 1) The direct voltages indicated in the circuit diagram are average voltages. They have been measured under the following conditions:
Contrast and brightness to minimum.
- 2) The oscillograms have been measured under the following conditions:
Signal from a RGB pattern generator (SBC 522) on colour bar pattern.
Adjust brightness and contrast for mechanical mid-position (click position).

D ANMERKUNGEN

- 1) Die Gleichspannungen im Prinzipschaltbild sind Durchschnittsspannungen. Sie wurden unter folgenden Bedingungen gemessen:
Kontrast und Helligkeit auf Mindestwert.
- 2) Die Oszillogramme wurden unter folgenden Bedingungen gemessen:
Signal von einem RGB generator (SBC 522) an Farbbalkenmuster.
Helligkeit und Kontrast in mechanischer Mittelstellung (Einschnappstellung).

NL OPMERKINGEN

- 1) De gelijkspanningen, die in het principe schema zijn aangegeven, zijn gemiddelde spanningen. Ze zijn gemeten onder de volgende kondities:
Contrast en helderheid op minimum.
- 2) De oscillogrammen zijn onder de volgende kondities gemeten:
Signaal van een RGB generator (SBC522) op kleurenbalk patroon.
Helderheid en contrast op mechanische middenstand (click positie)

F REMARQUES

- 1) Les tensions continues données au schéma de principe sont des tensions moyennes, elles ont été prélevées dans les conditions suivantes:
Contraste et luminosité, au minimum.
- 2) Les oscillogrammes ont été prélevés dans les conditions suivantes:
Signal d'un générateur SBC522 sur mire de barres de couleur.
Luminosité et contraste en position médiane (position à dé clic).

I NOTA

- 1) Le tensioni continue date nello schema di principio sono tensioni medie, sono state prelevate nelle condizioni seguenti:
Contrastor e luminosità, al minimo.
- 2) Gli oscillogrammi sono stati prelevati nelle condizioni seguenti:
Segnale di un generatore RVB (SBC522) su un segnale di barre colori.
Luminosità e contrasto in posizione media (posizione a scatto).

GB WARNING

All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce life drastically.
When repairing, make sure that you are connected with the same potential as the mass of the set via ■ wrist wrap with resistance. Keep components and tools also at this potential.

F ATTENTION

Tous les IC et beaucoup d'autres semi-conducteurs sont sensibles aux décharges statiques (ESD). Leur longévité pourrait être considérablement écourtée par le fait qu'aucune précaution n'est prise à leur manipulation.
Lors de réparations, s'assurer de bien être relié au même potentiel que la masse de l'appareil et enfiler le bracelet serti d'une résistance de sécurité.
Veiller à ce que les composants ainsi que les outils que l'on utilise soient également à ce potentiel.

D WARNUNG

Alle ICs und viele andere Halbleiter sind empfindlich gegen elektrostatische Entladungen (ESD).
Unsorgfältige Behandlung bei der Reparatur kann die Lebensdauer drastisch vermindern. Sorgen sie dafür, dass Sie im Reparaturfall über ein Pulsarmband mit Widerstand mit dem Massepotential des Gerätes verbunden sind. halten Sie Bauteile und Hilfsmittel ebenfalls auf diesem Potential.

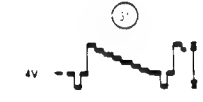
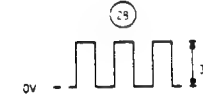
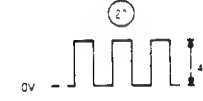
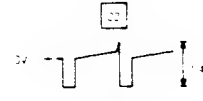
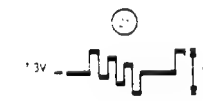
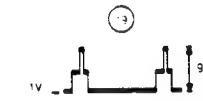
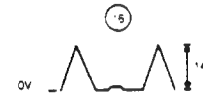
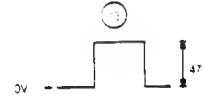
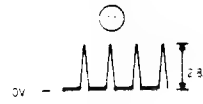
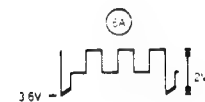
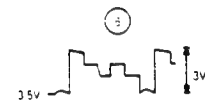
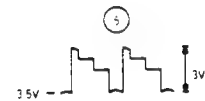
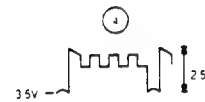
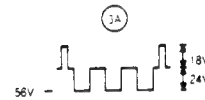
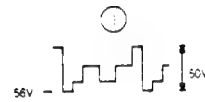
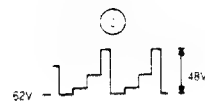
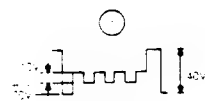


NL WAARSCHUWING

Alle IC's en vele andere halfgeleiders zijn gevoelig voor electrostatische ontladingen (ESD).
Onzorgvuldig behandelen tijdens reparatie kan de levensduur drastisch doen verminderen. Zorg ervoor dat u tijdens reparatie via een polsband met weerstand verbonden bent met hetzelfde potentiaal als de massa van het apparaat.
Houd componenten en hulpmiddelen ook op ditzelfde potentiaal.

I AVVERTIMENTO

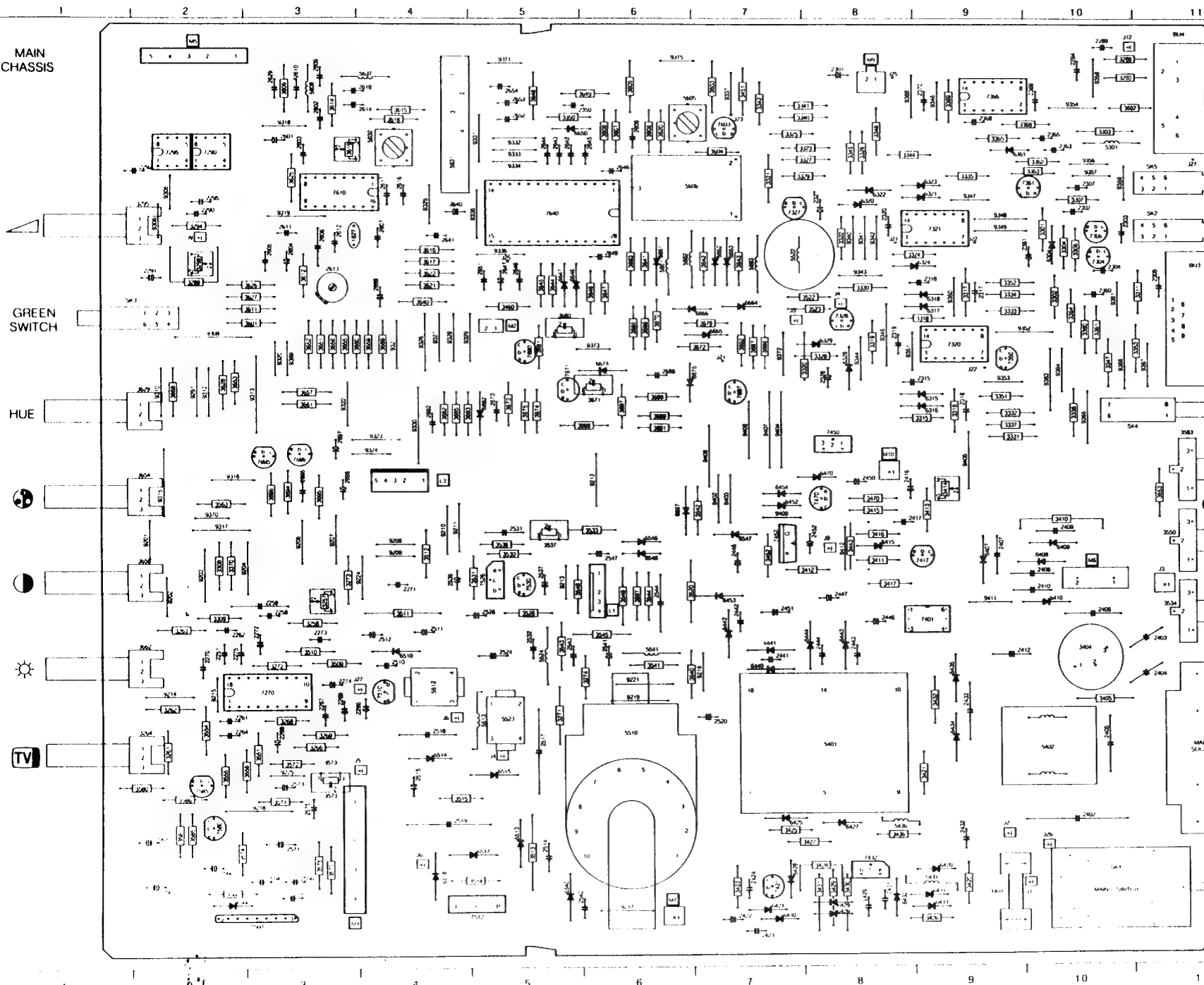
Tutti IC ■ parecchi semi-conduttori sono sensibili alle scariche statiche (ESD).
La loro longevità potrebbe essere fortemente ridatta in caso di non osservazione della più grande cauzione alla loro manipolazione.
Durante le riparazioni occorre quindi essere collegato allo stesso potenziale che quello della massa dell'apparecchio tramite un braccialetto a resistenza.
Assicurarsi che i componenti e anche gli utensili con quali si lavora siano anche a questo potenziale.



MAIN
CHASSISGREEN
SWITCH

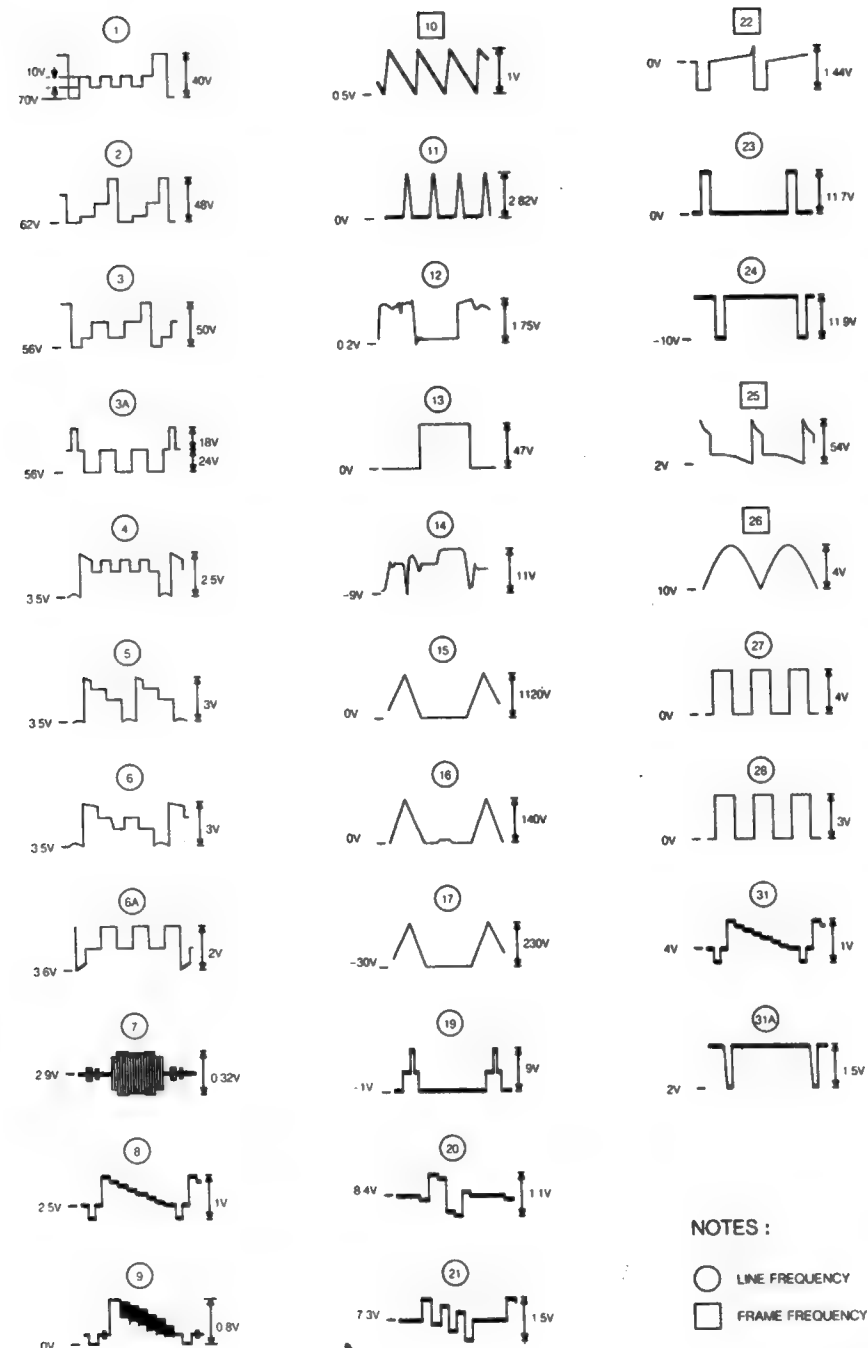
HUE

TV





A	J1	H8	2602	A3	3515	G4	8321	B8	9337	A7
	J2	C8	2603	A3	3520	F7	8322	B8	9340	B6
	J3	E11	2604	B3	3522	C8	8323	B8	9341	B8
	J4	C8	2605	B3	3523	C8	8324	B8	9342	B8
	J5	C7	2606	B3	3524	C5	8325	C6	9343	C8
	J6	C7	2607	B4	3530	F5	8326	C8	9344	C8
	J7	C5	2608	A3	3531	F5	8327	C8	9345	C8
	J8	C4	2609	A3	3533	F6	8328	E8	9346	A8
	J9	H4	2610	A3	3534	F11	8329	E10	9347	B8
	J10	B2	2611	B3	3535	F5	8330	E10	9348	B8
B	J11	F8	2612	B3	3537	F5	8331	E10	9349	B8
	J12	B1	2613	C3	3540	F7	8332	E10	9350	B8
	J13	C4	2614	A4	3541	F6	8333	F8	9351	C8
	J14	H3	2615	A4	3542	F7	8334	H8	9352	C8
	J15	H3	2616	A4	3543	F7	8335	H8	9353	C8
	J16	A2	2617	A4	3544	F6	8336	H8	9354	A10
	J17	H10	2618	A4	3545	F6	8337	H8	9355	A10
	J18	H6	2619	A4	3546	F6	8338	H7	9356	A10
	J19	H6	2620	A4	3547	F6	8339	H7	9357	A10
	J20	B11	2621	B4	3548	F5	8340	H8	9358	A10
C	B03	B11	2622	A5	3550	E11	8341	H7	9359	B10
	B04	B11	2623	A5	3551	G3	8342	H8	9360	C10
	B05	B11	2624	A6	3552	G2	8343	H8	9361	C10
	B06	B11	2625	A6	3554	G2	8344	H8	9362	C10
	B07	B11	2626	A6	3555	G2	8345	H8	9363	D10
	B08	B11	2627	C5	3558	G3	8346	F8	9364	C10
	B09	B11	2628	C5	3560	H2	8347	F7	9365	C11
	B10	B11	2629	C5	3570	H3	8348	F7	9366	C11
	B11	B11	2630	C5	3571	G3	8349	F8	9367	C11
	B12	B11	2631	C5	3572	H3	8350	F7	9368	C11
D	F27	F31	2634	A5	3573	G3	8352	E7	9372	C7
	F28	F31	2635	A5	3574	G3	8353	E7	9373	C7
	F29	F31	2636	A5	3575	G3	8354	E7	9374	C7
	F30	F31	2637	A5	3576	G3	8355	E7	9375	A6
	F31	F31	2638	A5	3577	G3	8356	E7	9376	A6
	F32	F31	2639	A5	3578	G3	8357	E7	9377	A6
	F33	F31	2640	A5	3579	G3	8358	E7	9378	A6
	F34	F31	2641	A5	3580	G3	8359	E7	9379	A6
	F35	F31	2642	A5	3581	G3	8360	E7	9380	A6
	F36	F31	2643	A5	3582	G3	8361	E7	9381	A6
E	F37	F31	2644	A5	3583	G3	8362	E7	9382	A6
	F38	F31	2645	A5	3584	G3	8363	E7	9383	A6
	F39	F31	2646	A5	3585	G3	8364	E7	9384	A6
	F40	F31	2647	A5	3586	G3	8365	E7	9385	A6
	F41	F31	2648	A5	3587	G3	8366	E7	9386	A6
	F42	F31	2649	A5	3588	G3	8367	E7	9387	A6
	F43	F31	2650	A5	3589	G3	8368	E7	9388	A6
	F44	F31	2651	A5	3590	G3	8369	E7	9389	A6
	F45	F31	2652	A5	3591	G3	8370	E7	9390	A6
	F46	F31	2653	A5	3592	G3	8371	E7	9391	A6
F	F47	F31	2654	A5	3593	G3	8372	E7	9392	A6
	F48	F31	2655	A5	3594	G3	8373	E7	9393	A6
	F49	F31	2656	A5	3595	G3	8374	E7	9394	A6
	F50	F31	2657	A5	3596	G3	8375	E7	9395	A6
	F51	F31	2658	A5	3597	G3	8376	E7	9396	A6
	F52	F31	2659	A5	3598	G3	8377	E7	9397	A6
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	F54	F31	2661	A5	3600	G3	8379	E7	9399	A6
	F55	F31	2662	A5	3601	G3	8380	E7	9400	A6
	F56	F31	2663	A5	3602	G3	8381	E7	9401	A6
G	F57	F31	2664	A5	3603	G3	8382	E7	9402	A6
	F58	F31	2665	A5	3604	G3	8383	E7	9403	A6
	F59	F31	2666	A5	3605	G3	8384	E7	9404	A6
	F60	F31	2667	A5	3606	G3	8385	E7	9405	A6
	F61	F31	2668	A5	3607	G3	8386	E7	9406	A6
	F62	F31	2669	A5	3608	G3	8387	E7	9407	A6
	F63	F31	2670	A5	3609	G3	8388	E7	9408	A6
	F64	F31	2671	A5	3610	G3	8389	E7	9409	A6
	F65	F31	2672	A5	3611	G3	8390	E7	9410	A6
	F66	F31	2673	A5	3612	G3	8391	E7	9411	A6
H	F67	F31	2674	A5	3613	G3	8392	E7	9412	A6
	F68	F31	2675	A5	3614	G3	8393	E7	9413	A6
	F69	F31	2676	A5	3615	G3	8394	E7	9414	A6
	F70	F31	2677	A5	3616	G3	8395	E7	9415	A6
	F71	F31	2678	A5	3617	G3	8396	E7	9416	A6
	F72	F31	2679	A5	3618	G3	8397	E7	9417	A6
	F73	F31	2680	A5	3619	G3	8398	E7	9418	A6
	F74	F31	2681	A5	3620	G3	8399	E7	9419	A6
	F75	F31	2682	A5	3621	G3	8400	E7	9420	A6
	F76	F31	2683	A5	3622	G3	8401	E7	9421	A6

WAVE FORMS



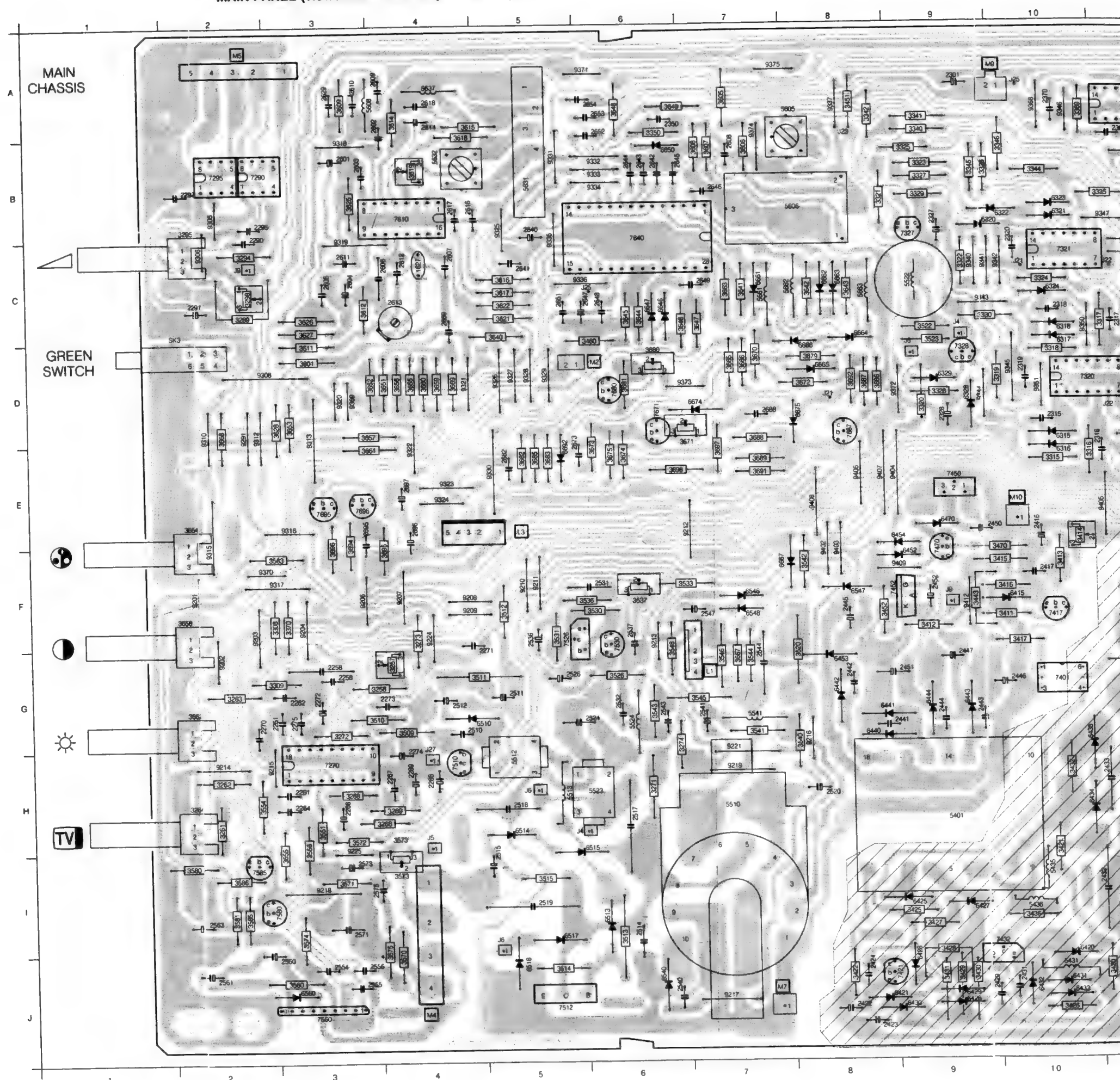
NOTES :

 LINE FREQUENCY

 FRAME FREQUENCY

ESV 00146
OSC CM1000
T06-9012

MAIN PANEL (viewed from the component side)



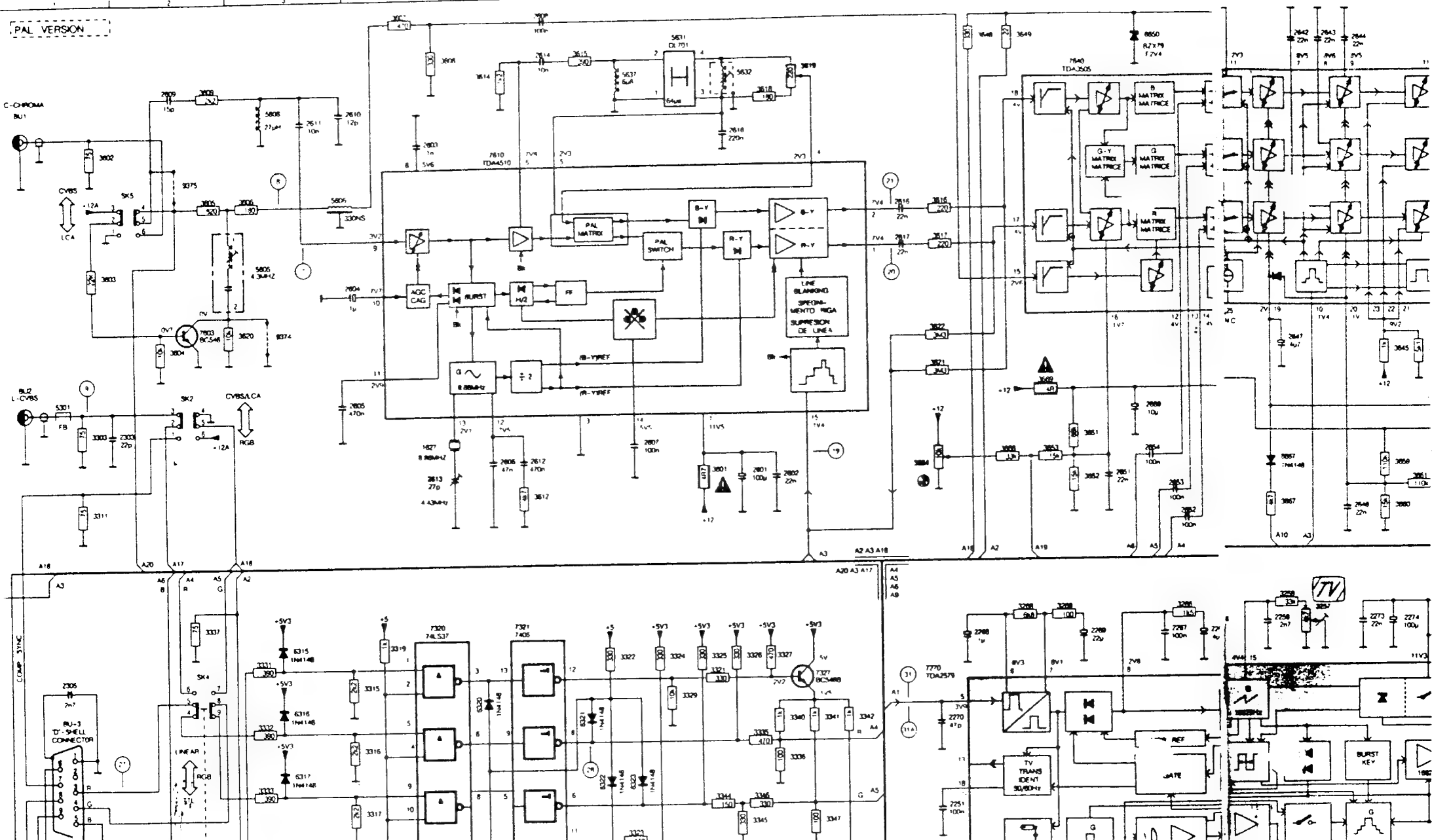
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J4	C9	2561	J2	3411	F10	3674	E6	7696	E3
J5	H5	2563	I2	3412	F10	3675	E6	7698	B12
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J4	H4	2573	I3	3414	F10	3680	D6	7702	G2
J6	H5	2575	I3	3415	F9	3681	D6	7703	F2
J7	C5	2601	B3	3416	F10	3681	D6	7704	F3
J8	C5	2602	B4	3420	G10	3682	E5	7705	F3
J9	F9	2603	B3	3420	G11	3683	E5	7707	F3
I1	G7	2604	C3	3421	G10	3685	E5	7708	F4
L3	E5	2605	C3	3422	J8	3686	D8	7709	F4
M2	D6	2606	C4	3425	J9	3687	D8	7710	F5
M4	J4	2608	A7	3426	J10	3687	D7	7711	F5
M5	A2	2608	B7	3427	J10	3689	E7	7712	E7
M5	F12	2609	A4	3428	J9	3689	E7	7713	G6
M7	J7	2610	A3	3429	J9	3691	E7	7714	H2
B03	B3	2613	C3	3430	J9	3691	E7	7715	H2
B09	A13	2611	C3	3432	J9	3692	D8	7716	C8
J12	A12	2612	C4	3432	H10	3694	F3	7717	J7
J21	C10	2613	C4	3436	G10	3694	F3	7718	I3
J21	D8	2614	A4	3443	F9	3695	F4	7719	H7
J21	C11	2615	A4	3443	F8	3696	F4	7720	F2
J22	D11	2616	B4	3452	F8	3696	F3	7724	F4
J23	B8	2617	B4	3460	D6	3697	E7	7725	H3
J25	A10	2618	A4	3470	F9	3698	E6	7729	D2
J25	C6	2629	A3	3509	G4	5301	B12	8305	B2
J27	I11	2631	B5	3510	G3	5302	H7	8316	C8
J27	H4	2641	C5	3510	G3	5402	H1	8308	D2
M10	E10	2641	C5	3511	G4	5431	J10	8310	D2
SK1	J12	2642	B6	3512	F5	5435	I10	8312	D2
SK1	K13	2643	B6	3513	I6	5436	I10	8313	E3
SK3	C2	2643	B6	3513	J5	5437	H7	8315	F2
SK4	E12	2643	B6	3515	I5	5512	H5	8316	E3
1401	J11	2644	B6	3520	G8	5513	H5	8317	F2
1627	C4	2644	B6	3522	C9	5522	C9	8318	B3
2258	G3	2647	B7	3523	D9	5523	H6	8319	B3
2258	G3	2646	B7	3526	G6	551	G6	8320	C3
2258	G3	2647	C6	3530	F6	5541	G7	8321	D4
2261	H3	2648	C6	3530	F6	5605	A8	8322	E4
2262	G3	2648	C6	3531	F5	5606	H8	8323	E4
2262	H3	2648	C7	3531	F5	5607	A4	8324	E4
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2267	H4	2652	A6	3534	G13	5632	B4	8326	D5
2268	H3	2653	A6	3536	F5	5637	A4	8327	D5
2269	H4	2654	A6	3536	F5	5681	C7	8328	D5
2270	G2	2654	A4	3537	F6	5682	H8	8329	D5
2270	G2	2673	E5	3540	H8	5663	C8	8330	E5
2271	G4	2673	E6	3541	G7	6304	C12	8331	B5
2272	G3	2682	E5	3542	F8	6315	E10	8332	B6
2272	H4	2683	E5	3543	G8	6316	I10	8333	B6
2273	G4	2688	D7	3					
2274	H4	2695	E3	3544	G7	6318	C10	8335	C5
2275	G3	2695	F3	3545	G7	6320	B9	8336	C5
2275	G3	2696	E4	3546	G7	6321	B10	8337	A8
2275	I2	2697	E4	3547	G8	6322	B10	8338	C9
2290	B2	3257	G4	3550	F13	6323	B10	8341	B8
2291	C2	3258	G3	3551	H3	6324	C10	8342	C10
2292	B2	3261	H2	3553	F13	6328	D9	8343	C9
2292	H2	3261	H2	3554	H2	6329	D9	8344	D9
2295	B2	3262	H2	3555	H2	6330	D9	8345	D10
2301	A9	3263	G2	3556	I3	6407	F11	8346	A10
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2303	C12	3265	H3	3560	J3	6409	F12	8348	C11
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2317	C11	3274	H6	3574	I3	6427	I9	8356	B12
2318	C10	3288	A12	3575	J4	6428	J9	8357	B12
2318	C10	3289	C2	3580	I2	6429	J9	8358	A12
2319	D10	3293	A12	3581	I2	6430	J9	8359	B12
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2320	D10	3295	B2	3585	I2	6432	J10	8361	D12
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2327	B9	3301	C11	3601	D3	6434	H10	8364	D12
2327	B9	3302	B9	3602	D3	6435	H10	8365	E12
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2350	A6	3303	B12	3606	B7	6441	H8	8367	D13
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2361	I11	3306	C12	3609	A3	6444	G9	8370	F2
2363	B12	3307	B12	3609	A3	6452	F9	8371	A6
2365	B11	3308	F3	3611	D3	6453	H8	8372	D9
2365	B11	3309	G2	3612	C3	6454	E9	8373	D6
2368	H11	3310	C12	3612	C3	6470	E9	8374	B7
2368	A11	3315	I10	3613	A4	6471	E9	8375	A7
2370	A10	3315	I10	3615	A4	6513	I6	8402	F8
2370	A10	3316	E10	3616	C5	6514	H5	8403	F8
2402	I12	3316	E10	3617	C5	6515	H5	8404	E9
2402	I12	3317	C13	3618	A4	6515	I5	8405	E11
2404	G13	3318	D10	3618	B4	6518	I9	8406	E11
2405	H12	3318	D10	3620	B7	6540	J8	8407	E8
2406	G12	3319	D10	3621	C5	6546	F7	8408	E8
2407	F11	3320	D9	3622	C5	6547	F8	8409	F9
2407	F11	3320	B8	3623	C3	6548	F7	8411	G11
2409	F12	3322	C9	3626	C3	6560	J3	8412	F9
2410	G11	3323	B9	3627	C3	6646	C6		
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2416	E10	3324	C10	3640	C5	6650	B6		
2417	I10	3325	B8	3640	C7	6651	D7		
2422	J8	3325	B9	3641	C7	6662	C8		
2423	J8	3326	B9	3642	C8	6663	C8		
2424	J8	3327	B9	3642	C8	6664	C8		
2429	J9	3328	D9	3643	C8	6665	D8		
2431	J10	3328	D9	3644	C8	6666	C8		
2432	I11	3329	B9	3644	C6	6667	F7		
2433	H11	3329	B9	3645	C6	6674	D7		
2441	G8	3330	C9	3646	C7	6675	D8		
2441	G8	3331	E11	3647	C7	6676	E5		
2443	G9	3332	E11	3647	C7	6677	H3		
2444	G9	3333	D11	3647	C7	6678	H3		
2445	F8	3334	C11	3648	A6	7290	B2		
2446	G10	3335	B11	3649	A6	7304	C12		
2446	G10	3336	E12	3650	A6	7305	C12		
2450	E9	3337	E11	3651	D4	7320	D10		
2451	G9	3337	E11	3652	D4	7321	C10		
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2452	F9	3341	A9	3653	D3	7328	C9		
2511	G5	3342	A8	3654	E2	7330	B1		
2512	G4	3344	B10	3655	D4	7361	B1		
2514	I6	3344	B10	3656	D4	7366	A11		
2515	I5	3345	B9	3656	D4	7401	G10		
2516	H6	3346	E10	3657	D3	7402	G10		
2518	H5	3347	D12	3657	D3	7421	J9		
2519	I5	3350	B6	3658	F2	7432	J9		
2520	H8	3351	D11	3659	D4	7450	E9		
2521	G5	3352	E11	3660	A4	7451	F9		
2526	G5	3353	D12	3661	E3	7470	F9		
2531	F6	3360	D12	3661	E3	7510	H4		
2532	G6	3361	D12	3662	G2	7512	J5		
2536	F5	3362	B11	3663	C7	7526	F5		
2537	H6	3363	E11	3664	D7	7527	H6		
2540	J6	3364	D12	3665	D7	7560	J3		
2541	G7	3365	B11	3666	D7	7580	I3		
2543	G6	3365	B11	3667	G7	7585	I2		
2544	G7	3368	B11	3668	D2	7604	B4		
2547	F7	3369	A10	3669	D4	7640	C6		
2554	J3	3370	F3	3670	D7	7671	D6		

6460

L2

NOTES:

C-CHROMA
BU1



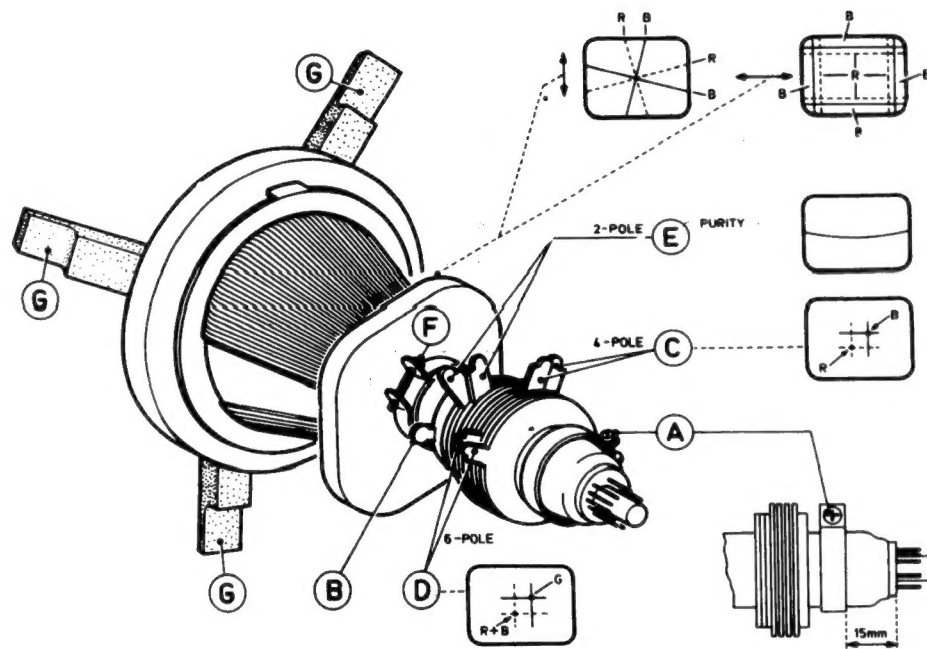


Fig. 3

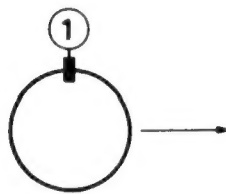


Fig. 4a

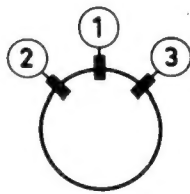


Fig. 4b

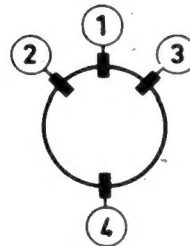


Fig. 4c

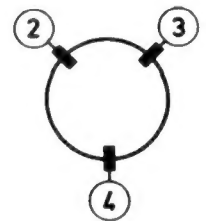


Fig. 4d

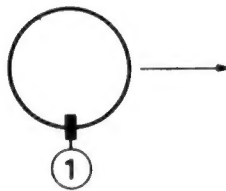


Fig. 5a

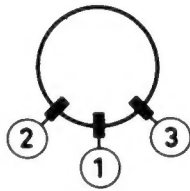


Fig. 5b

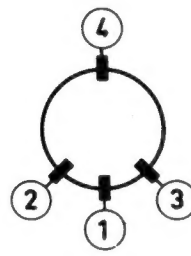


Fig. 5c

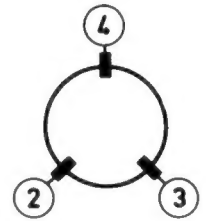
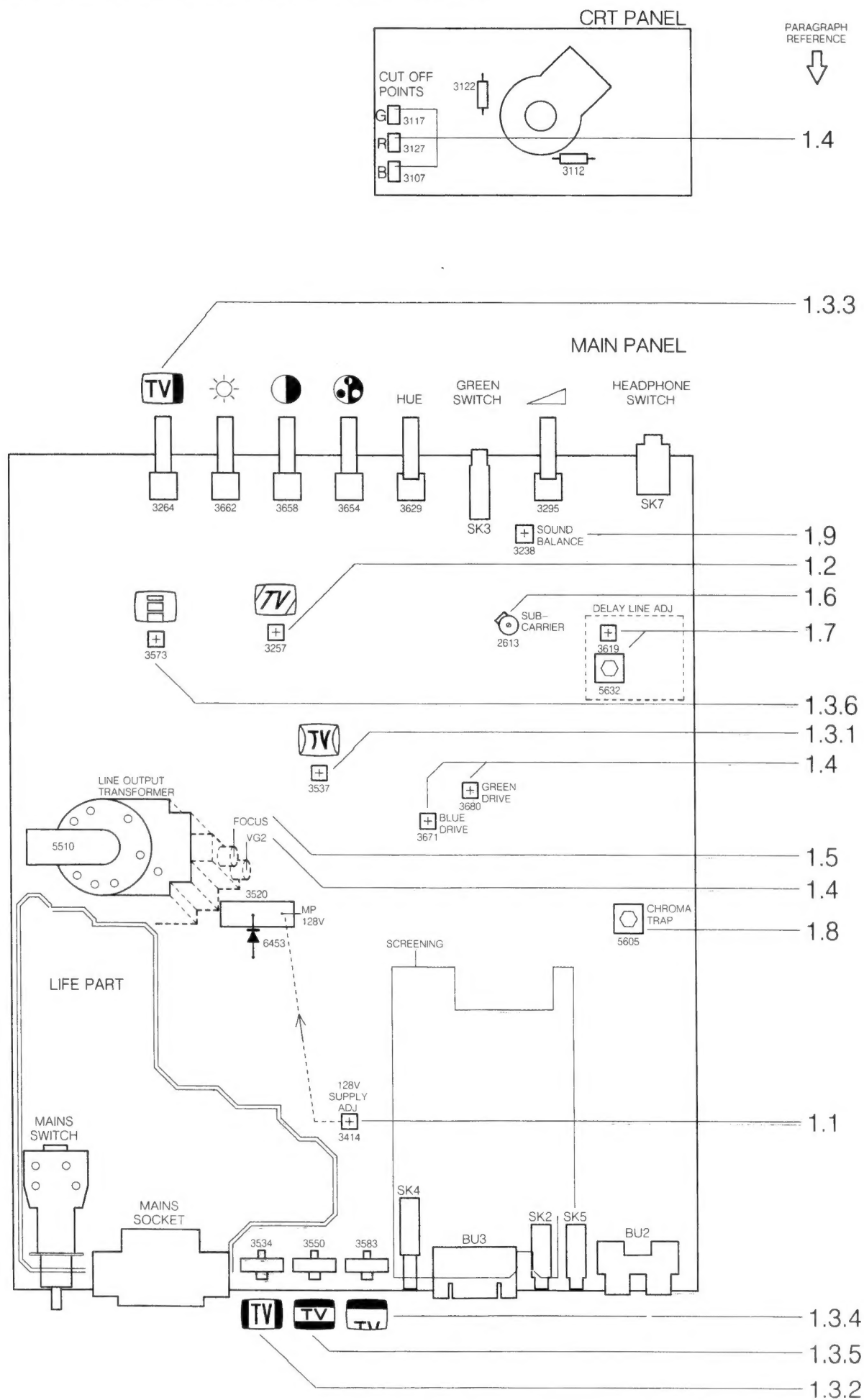


Fig. 5d

WIRING DIAGRAM



LOCATION OF ADJUSTING COMPONENTS



LOCATION OF ADJUSTING COMPONENTS

